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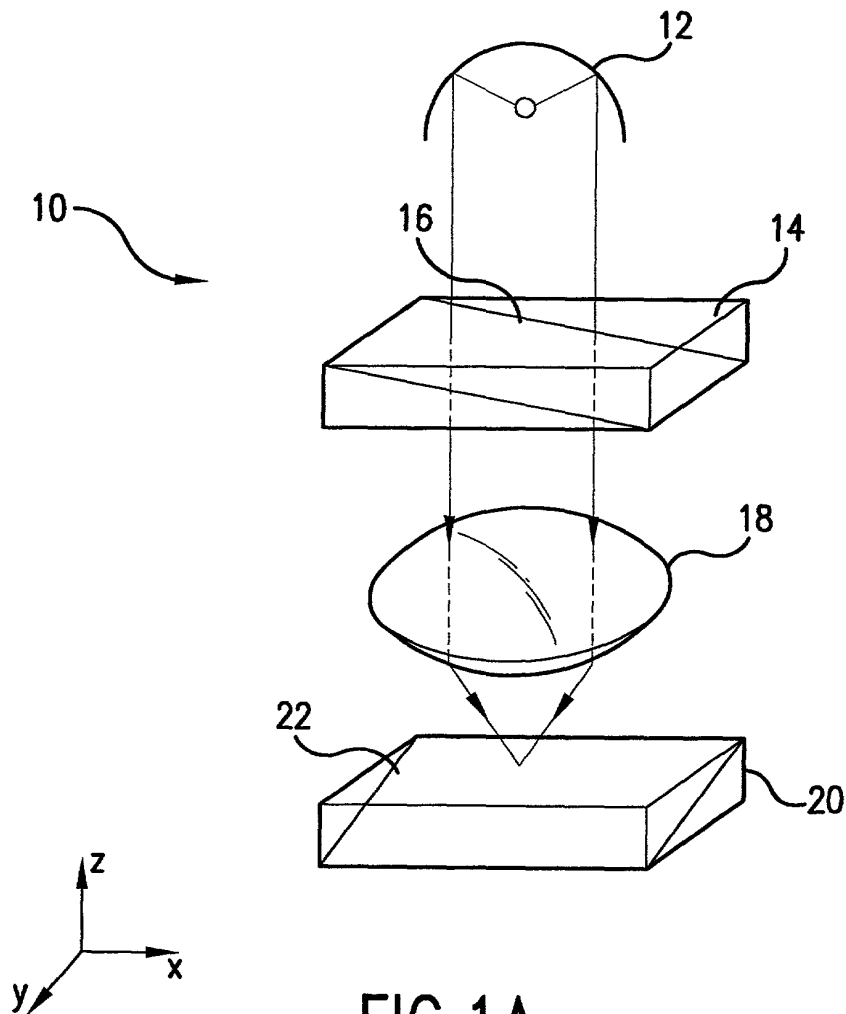


FIG. 1A

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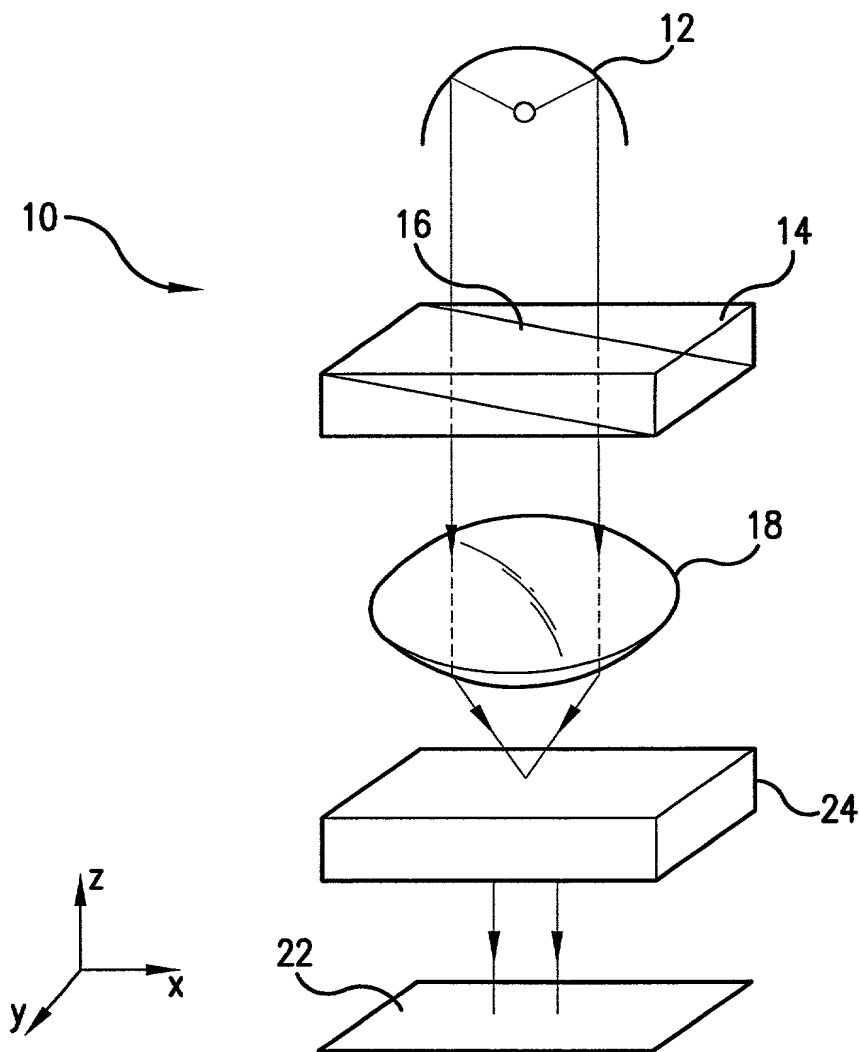


FIG.1B

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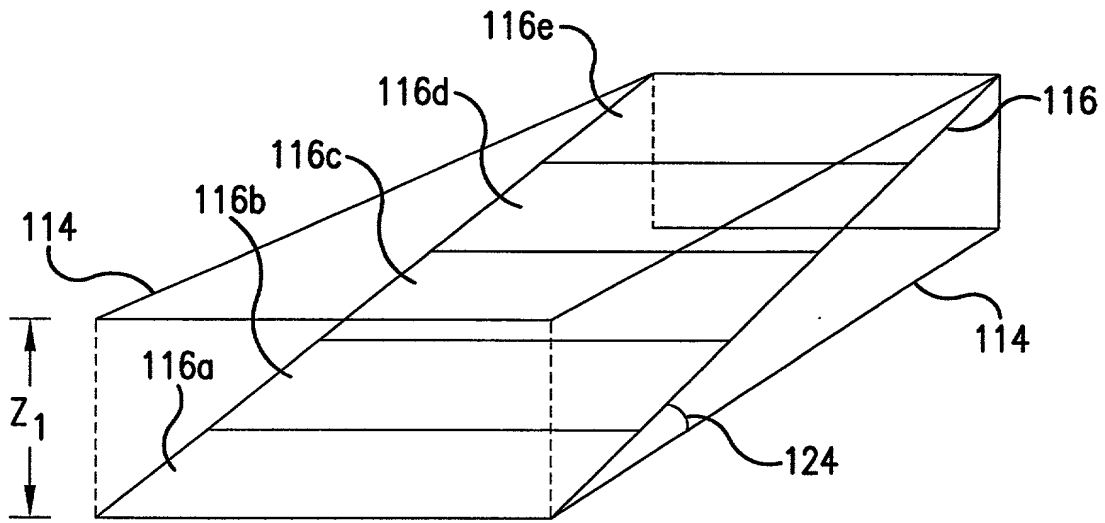


FIG. 2

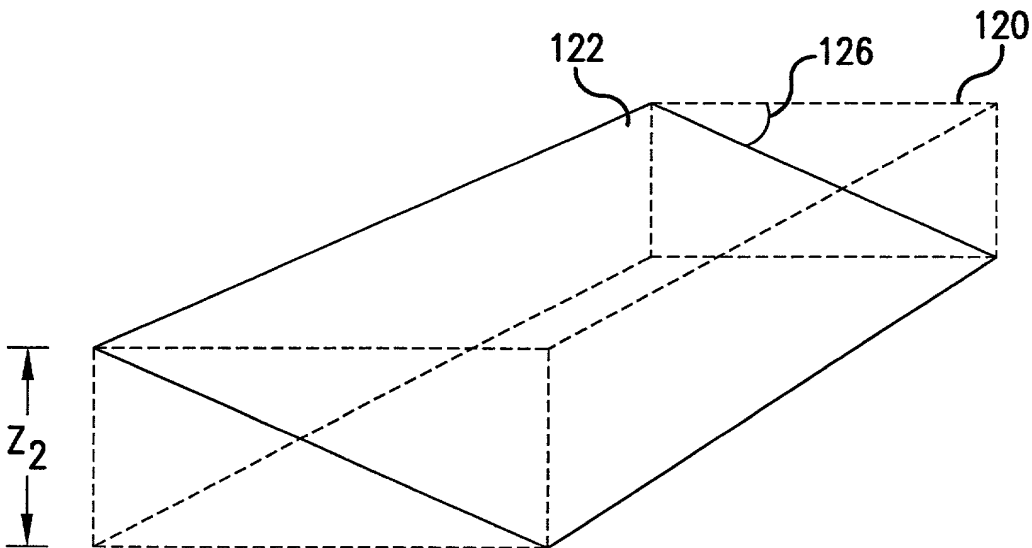


FIG. 3

FIG. 2

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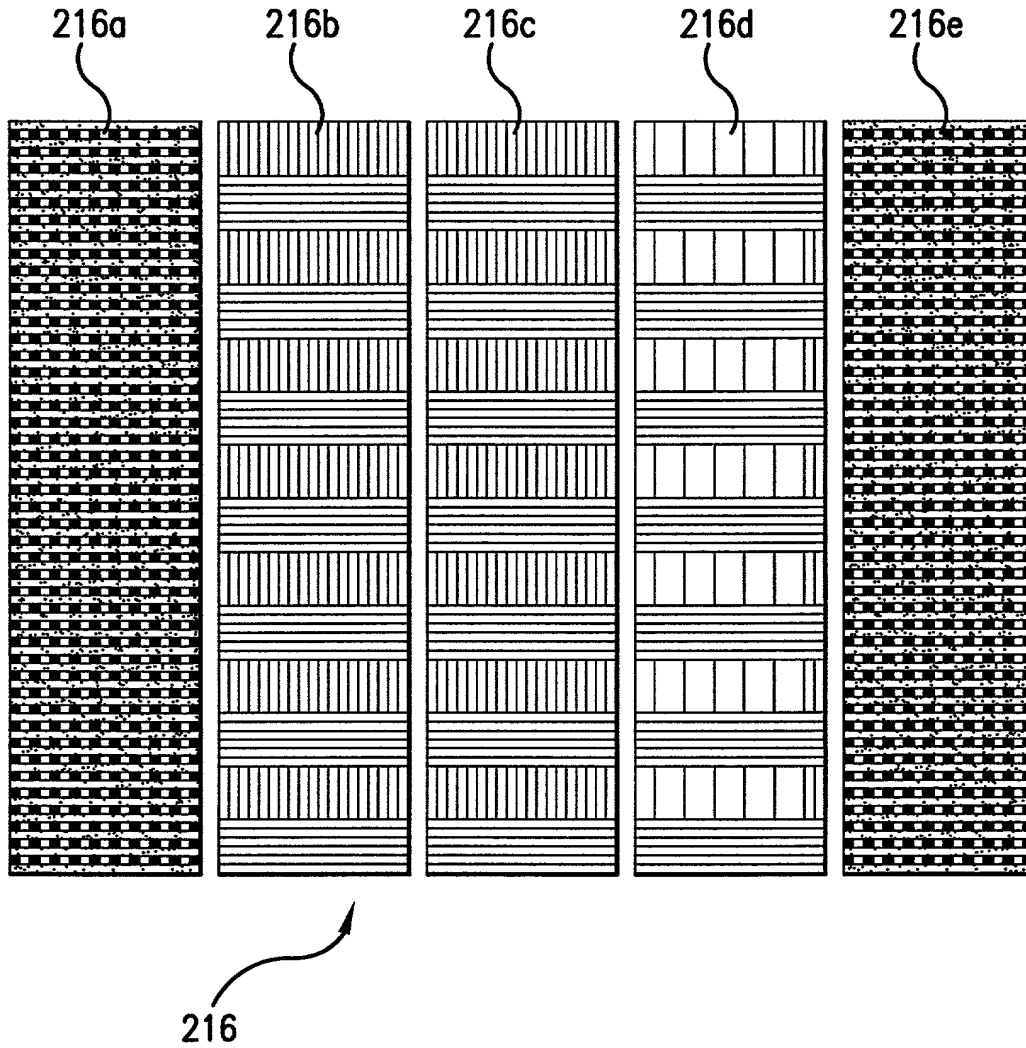


FIG. 4

FIG. 4

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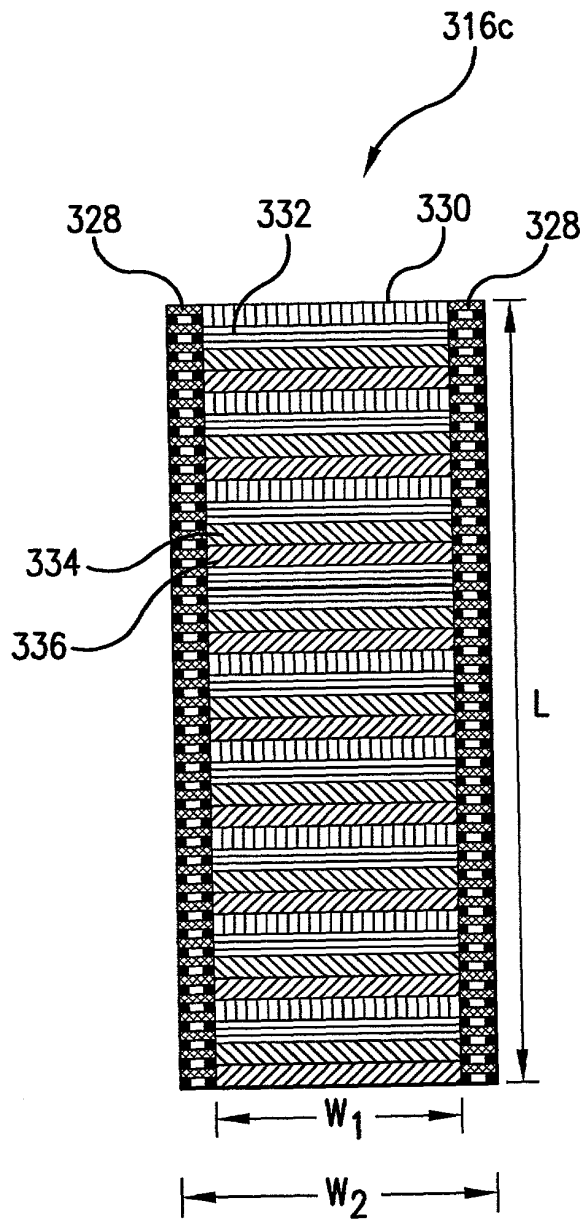


FIG. 5A

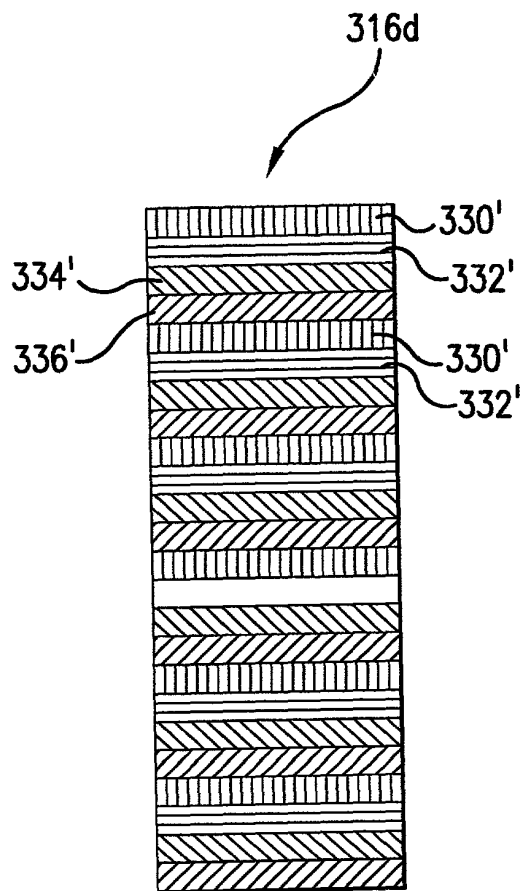


FIG. 5B

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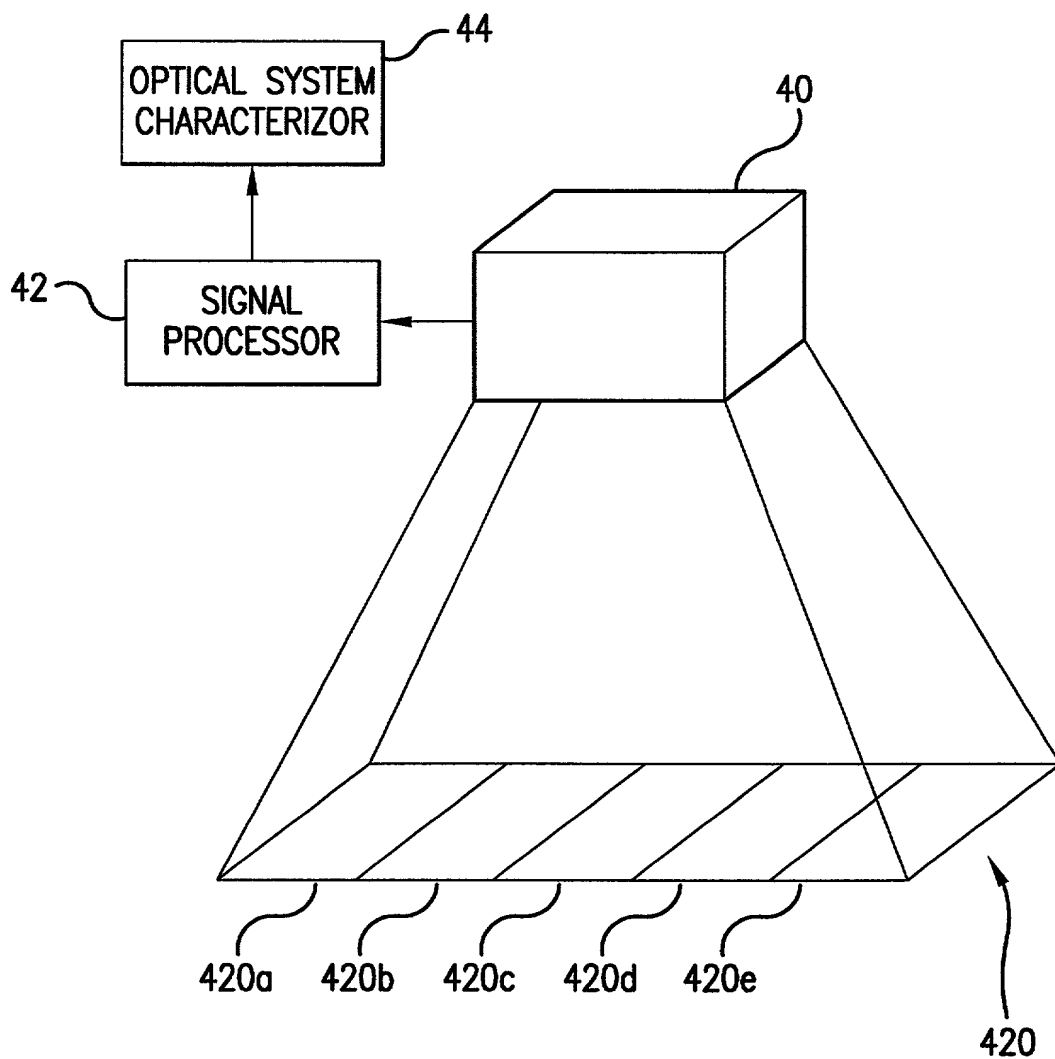


FIG. 6

FIG. 6 of 1875.0300001

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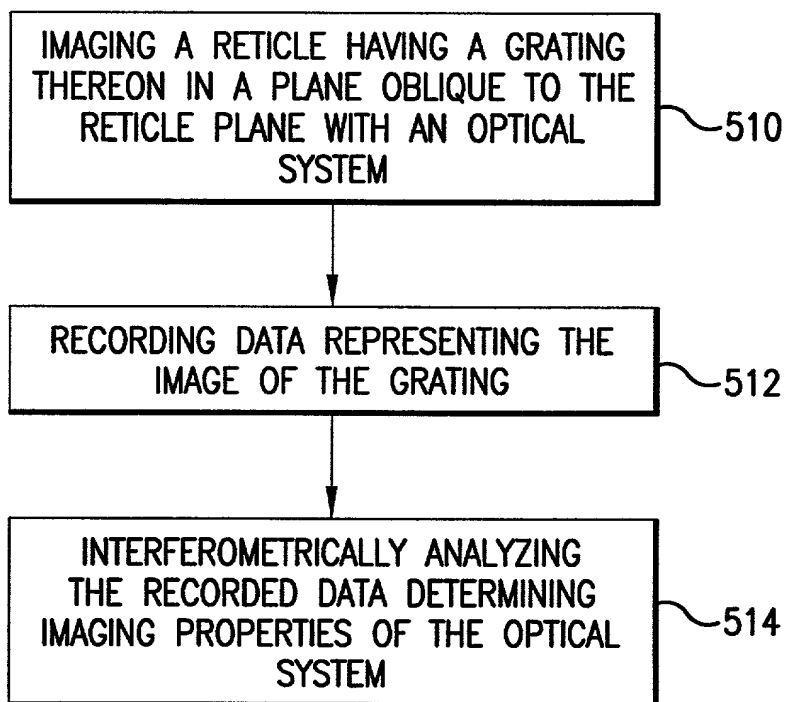


FIG.7

FIG. 7

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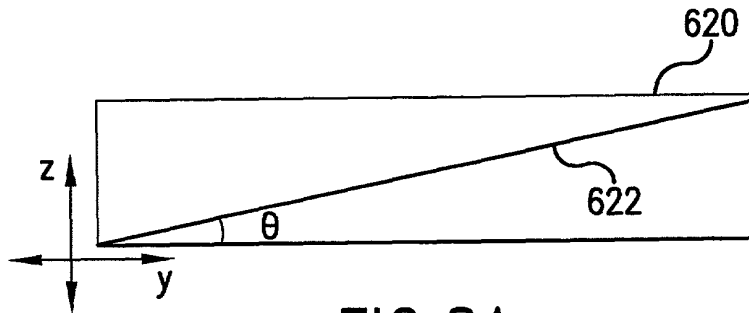


FIG. 8A

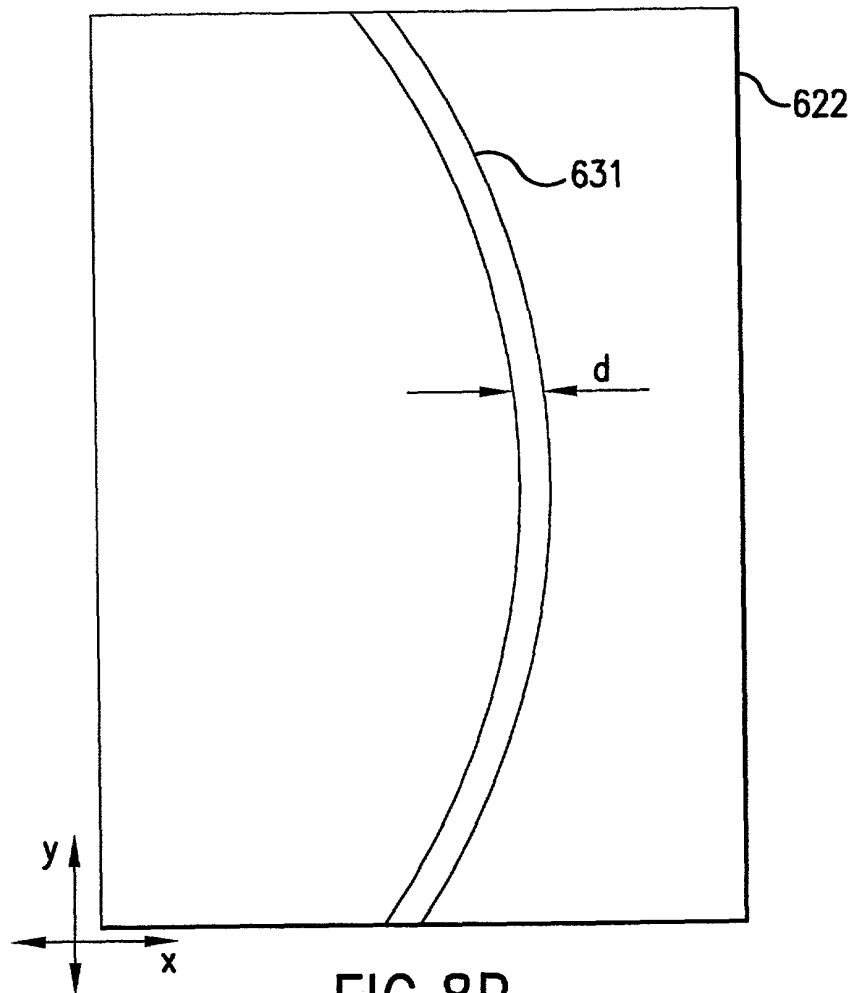


FIG. 8B

FIG. 8A

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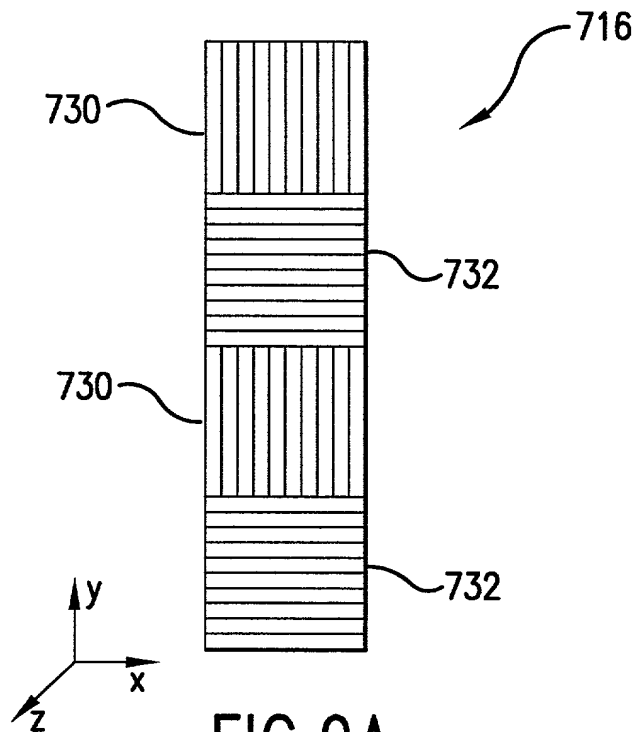


FIG. 9A

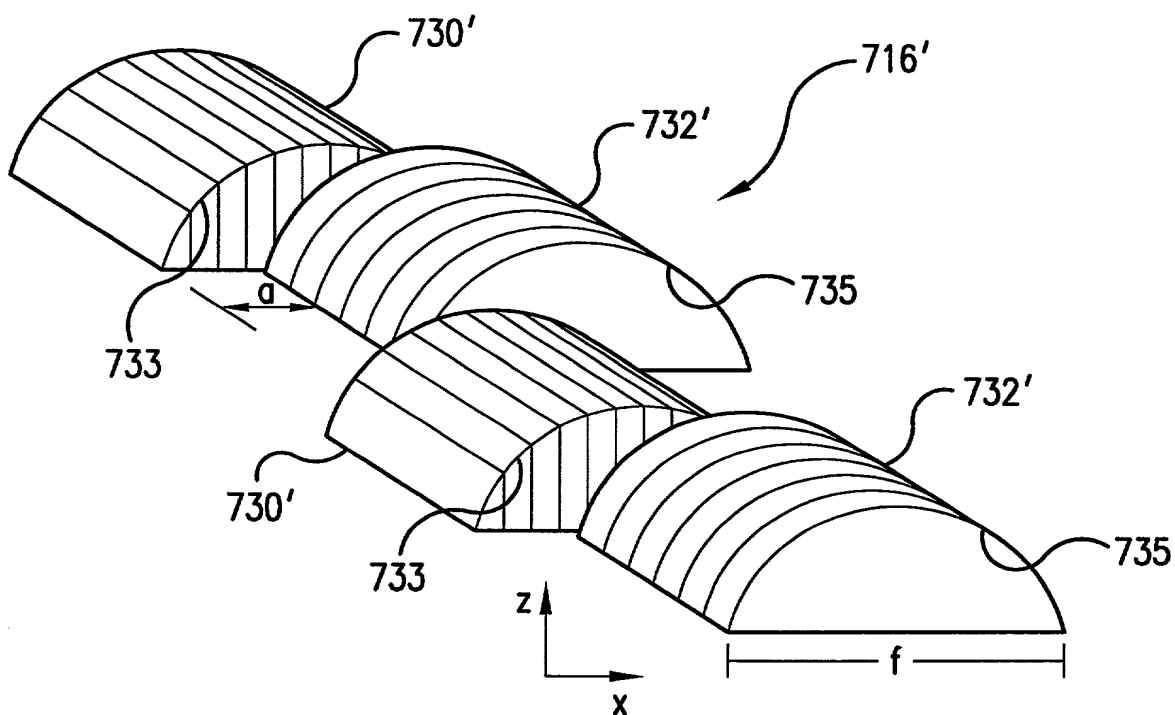


FIG. 9B

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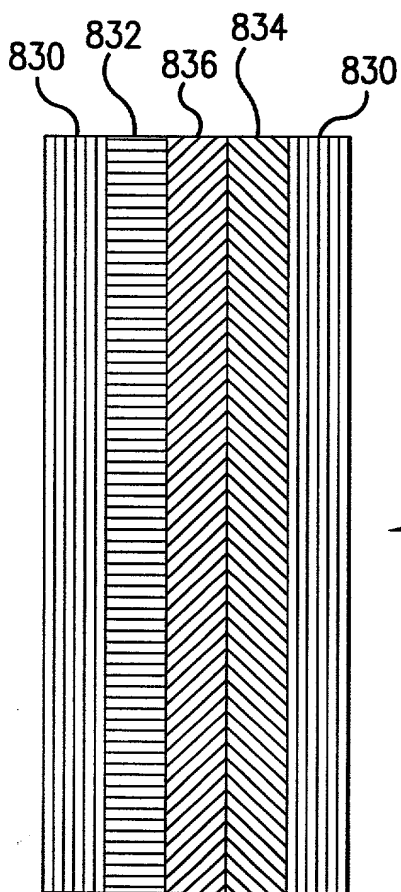
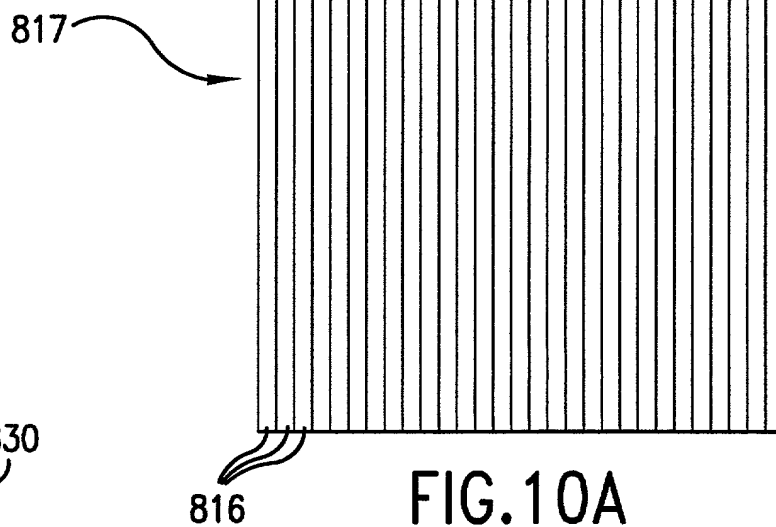


FIG.10B

FIG. 10A

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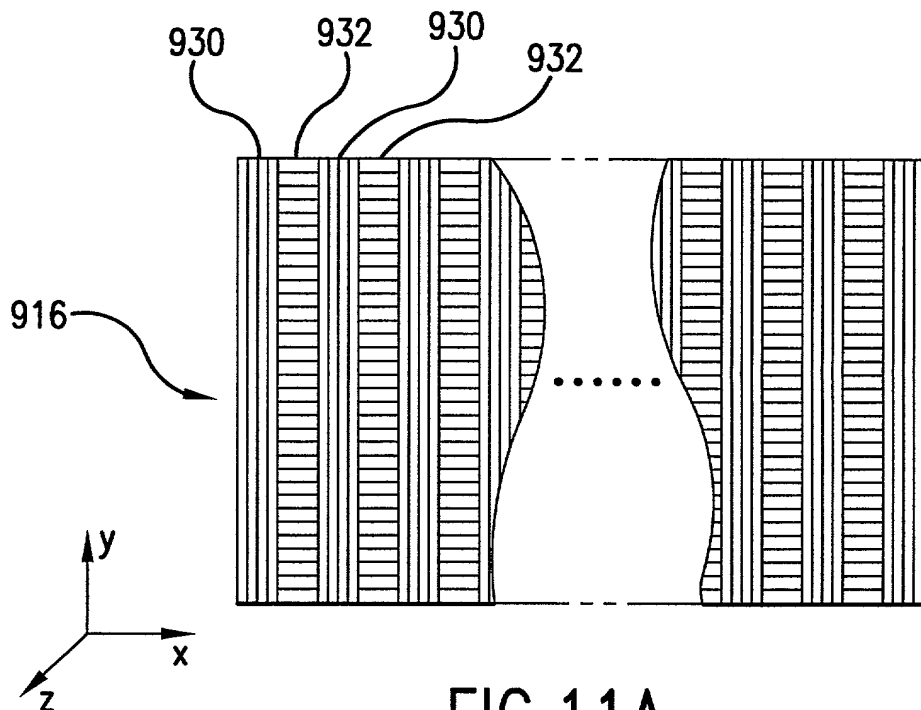


FIG. 11A

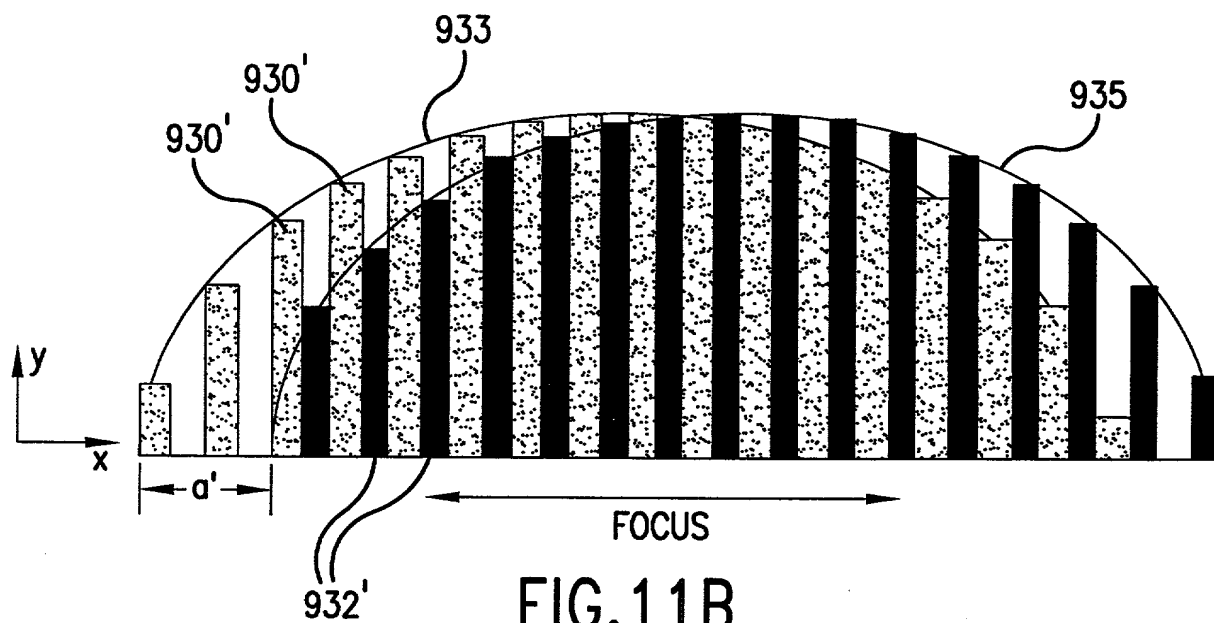


FIG. 11B

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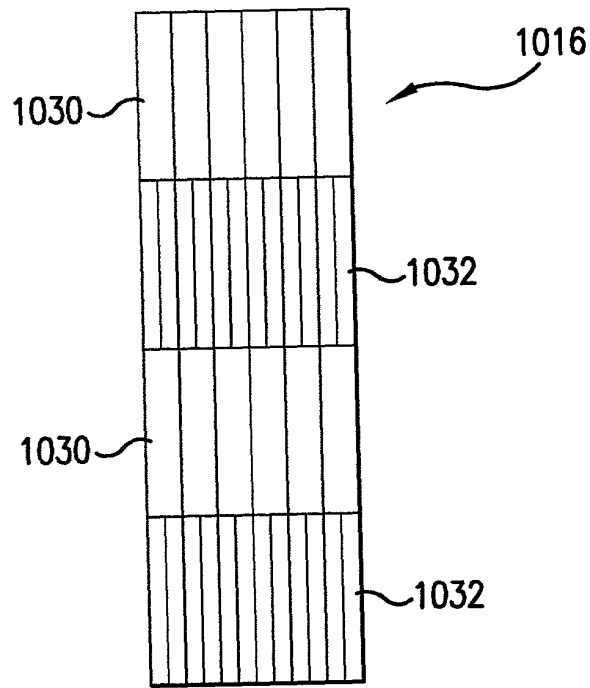


FIG. 12

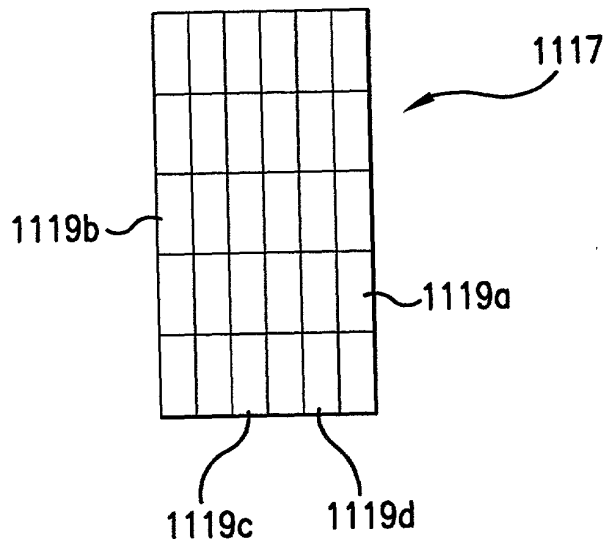


FIG. 13

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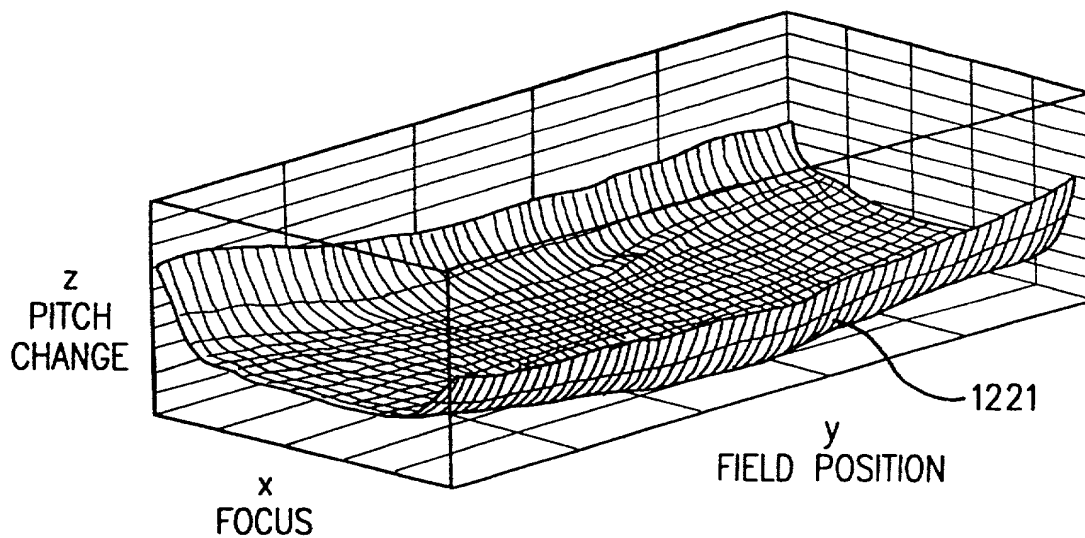


FIG. 14

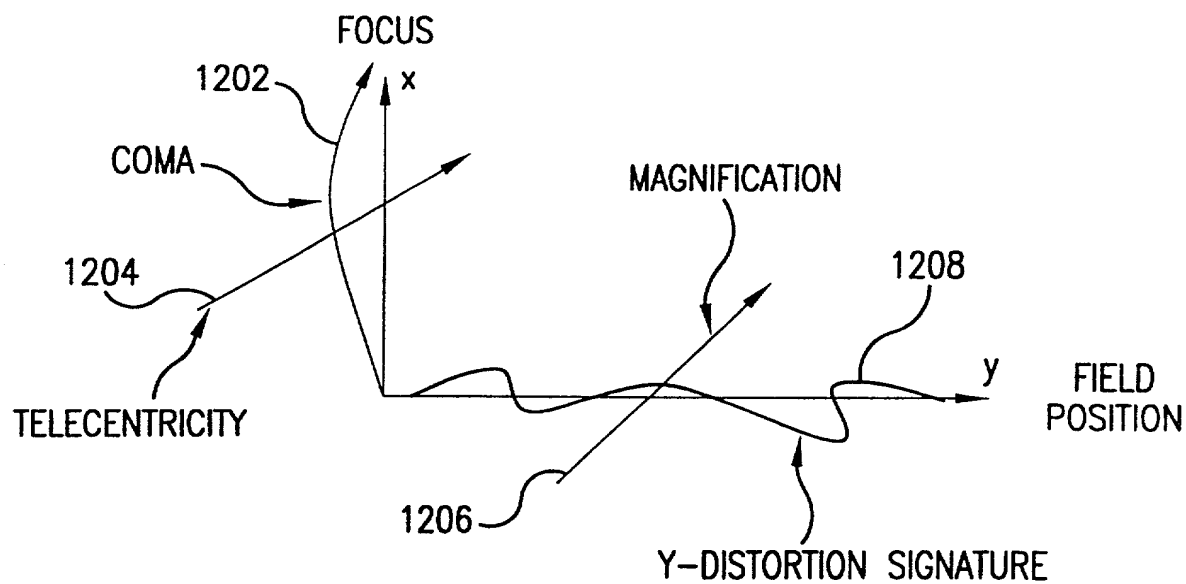
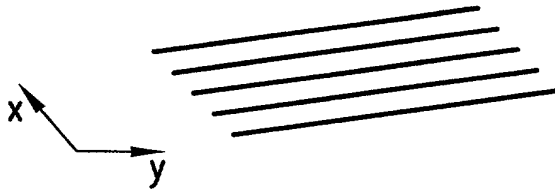


FIG. 15

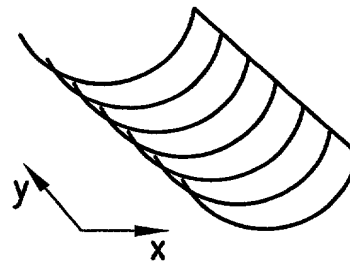
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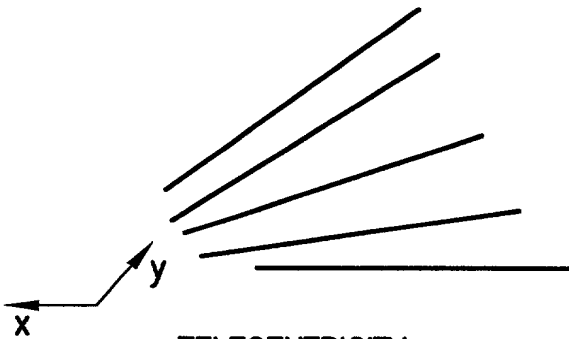
MAGNIFICATION

FIG.16A



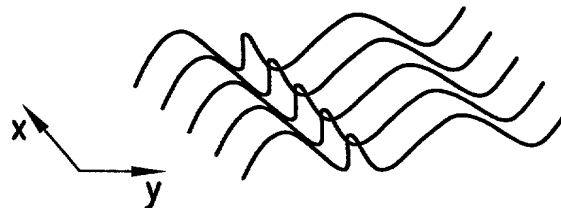
COMA

FIG.16B



TELECENTRICITY

FIG.16C



Y-DISTORTION SIGNATURE

FIG.16D

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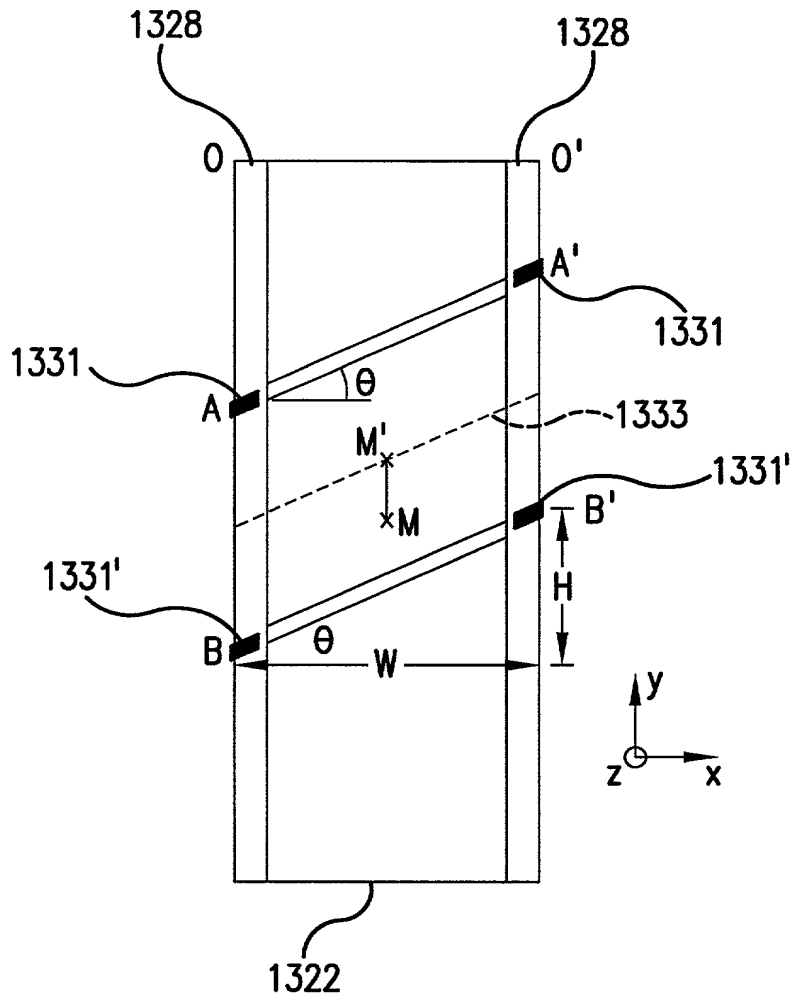


FIG.17

FIG. 17

Appl. No. 09/907,902; Group Art Unit: 2621
 Dkt. No. 1875.0300001;
 Inventor(s): Matthew E. Hansen; Tel: 202/371-2600
 Title: System and Method for Characterizing Optical System
 Using Holographic Reticles

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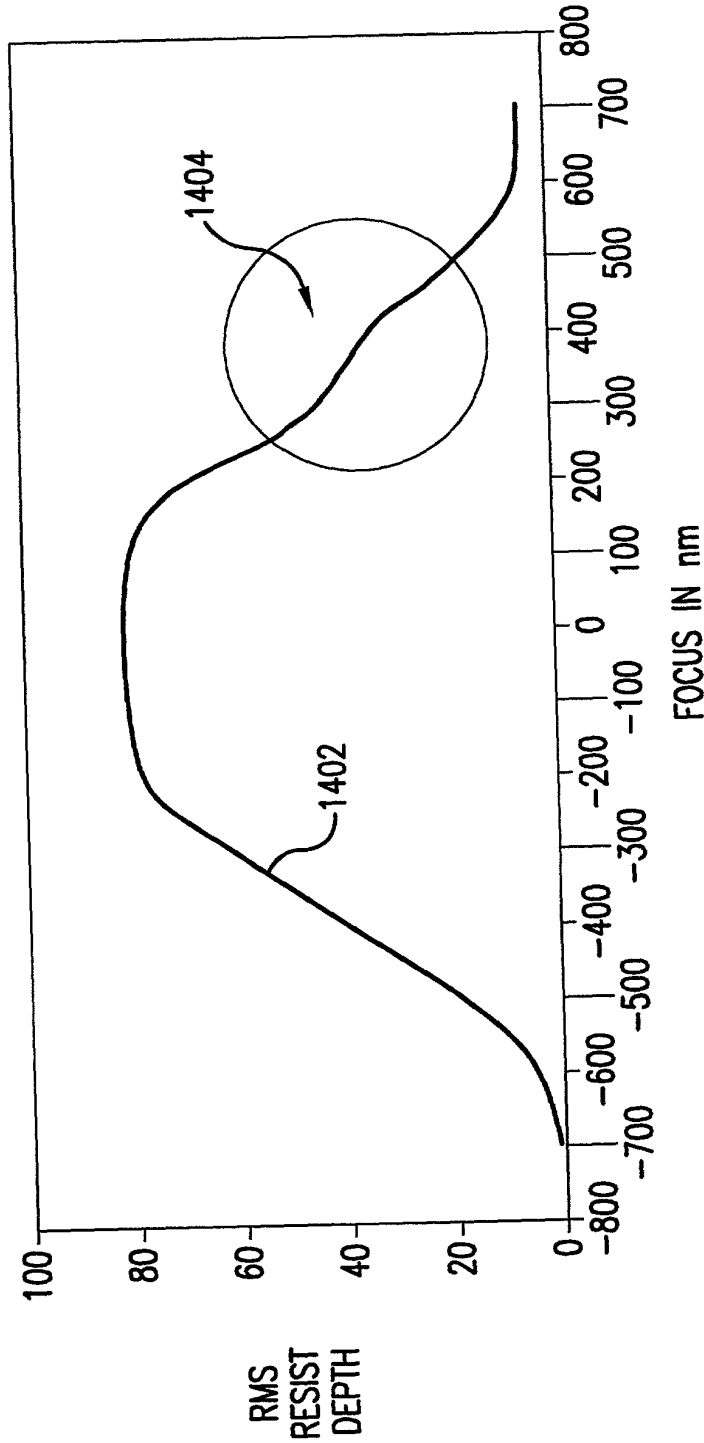


FIG.18

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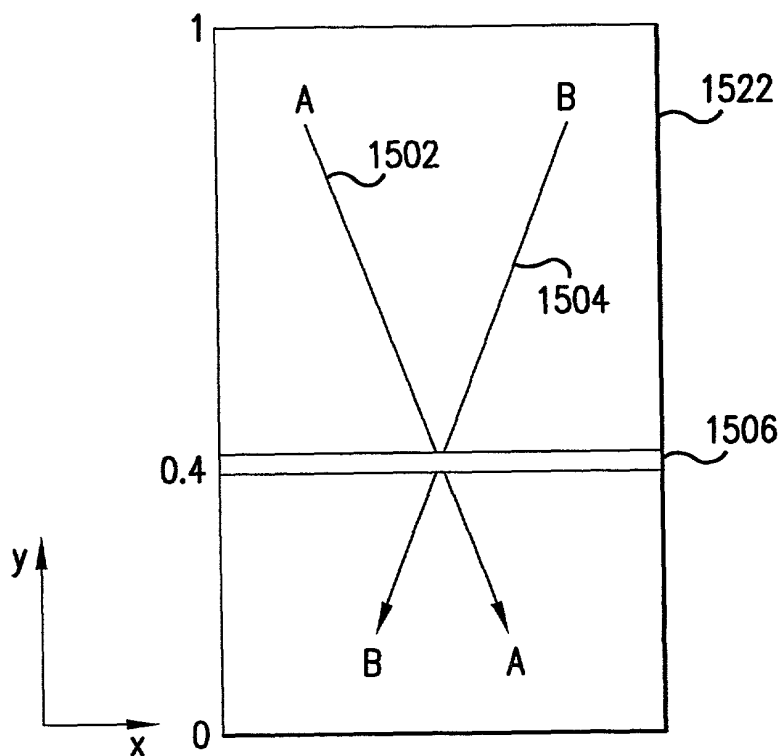


FIG.19A

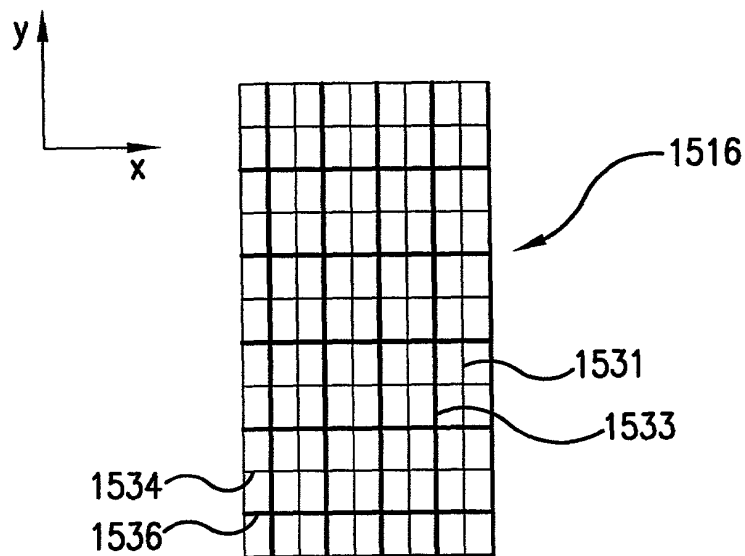


FIG.19B

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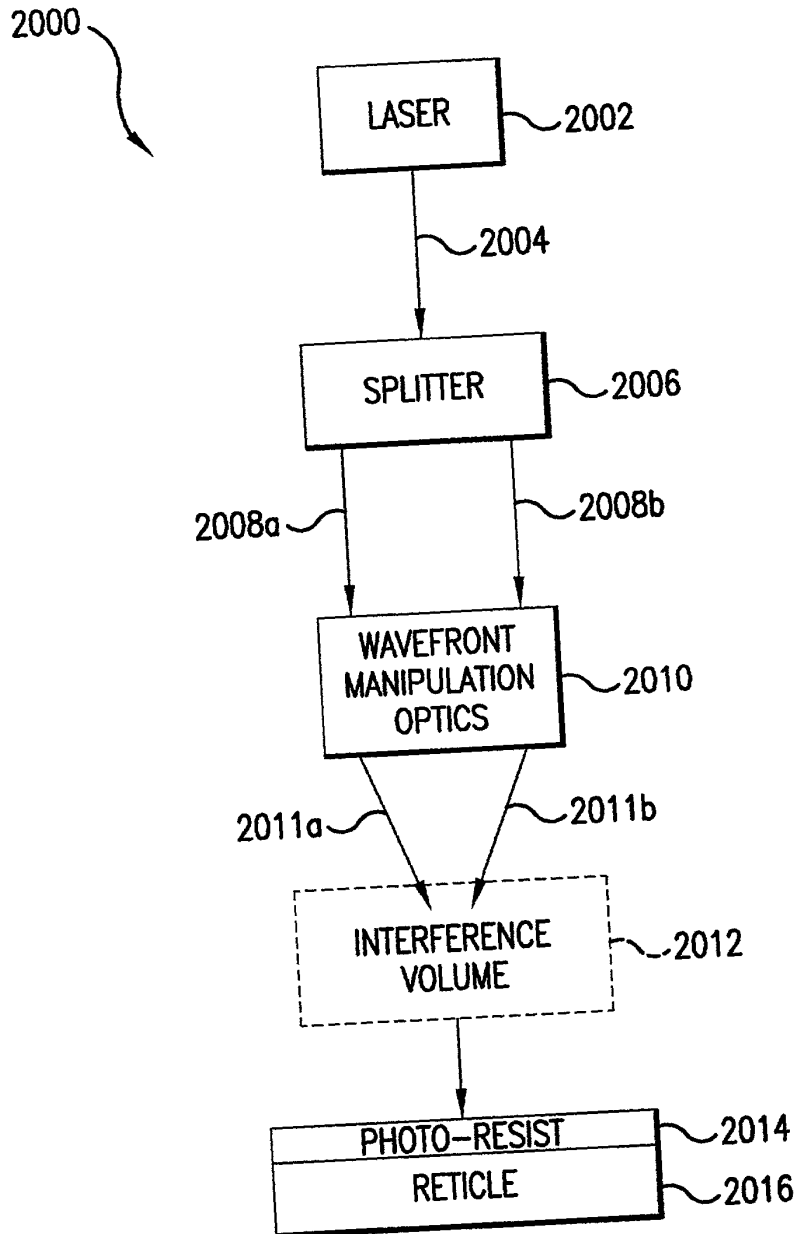


FIG.20

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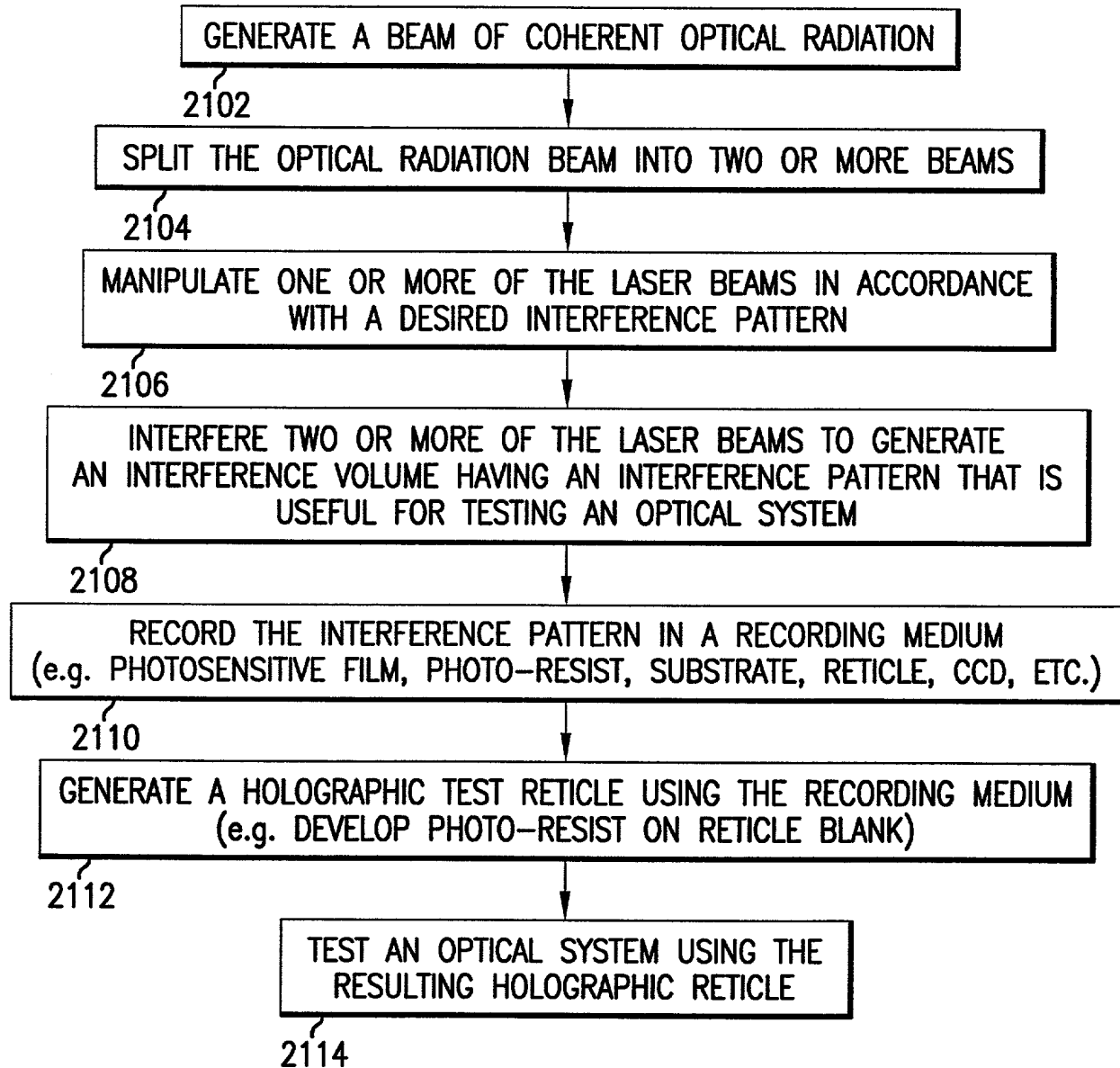


FIG.21

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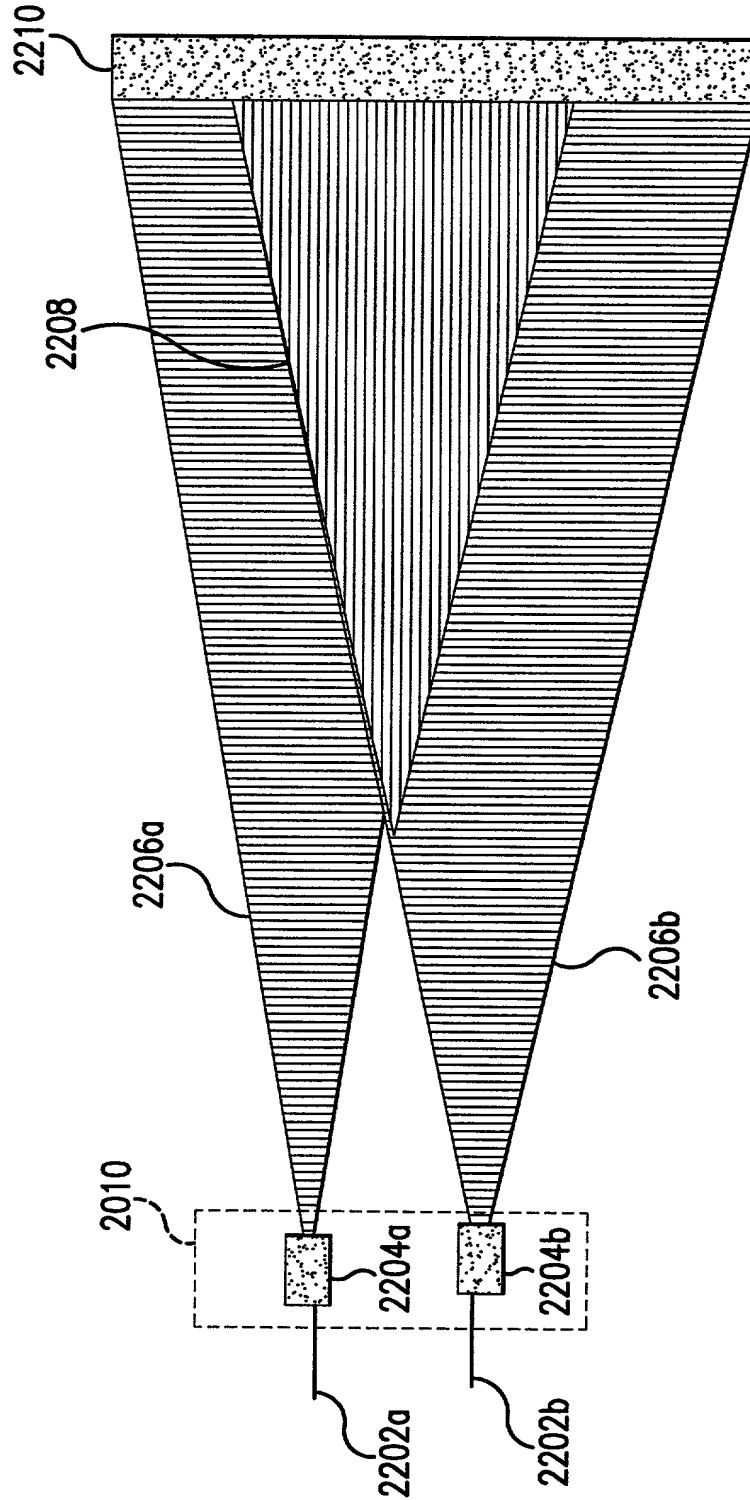


FIG. 22A

FIG. 22A

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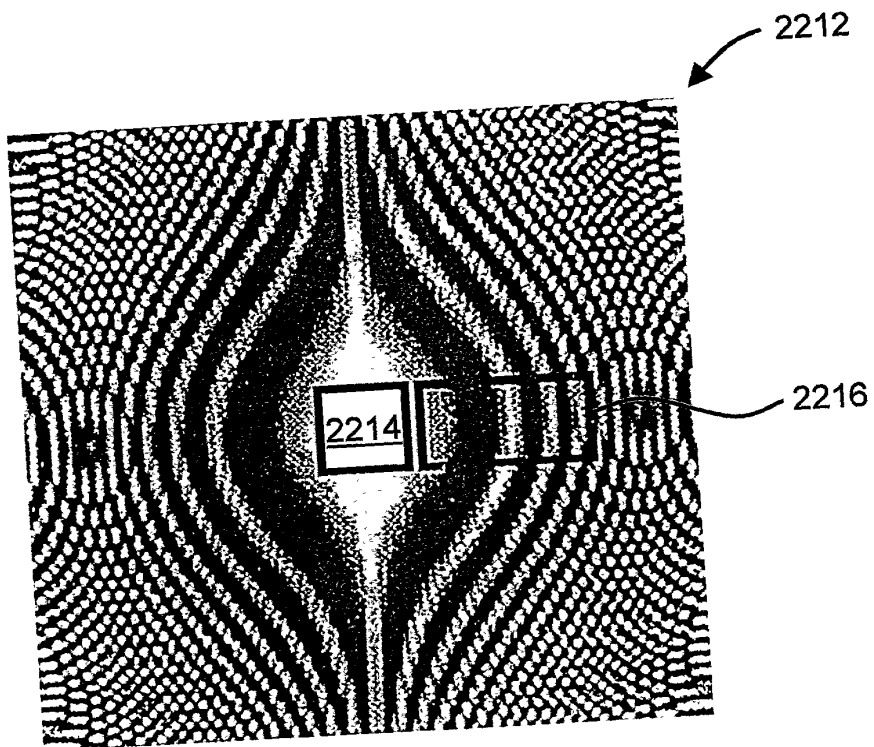
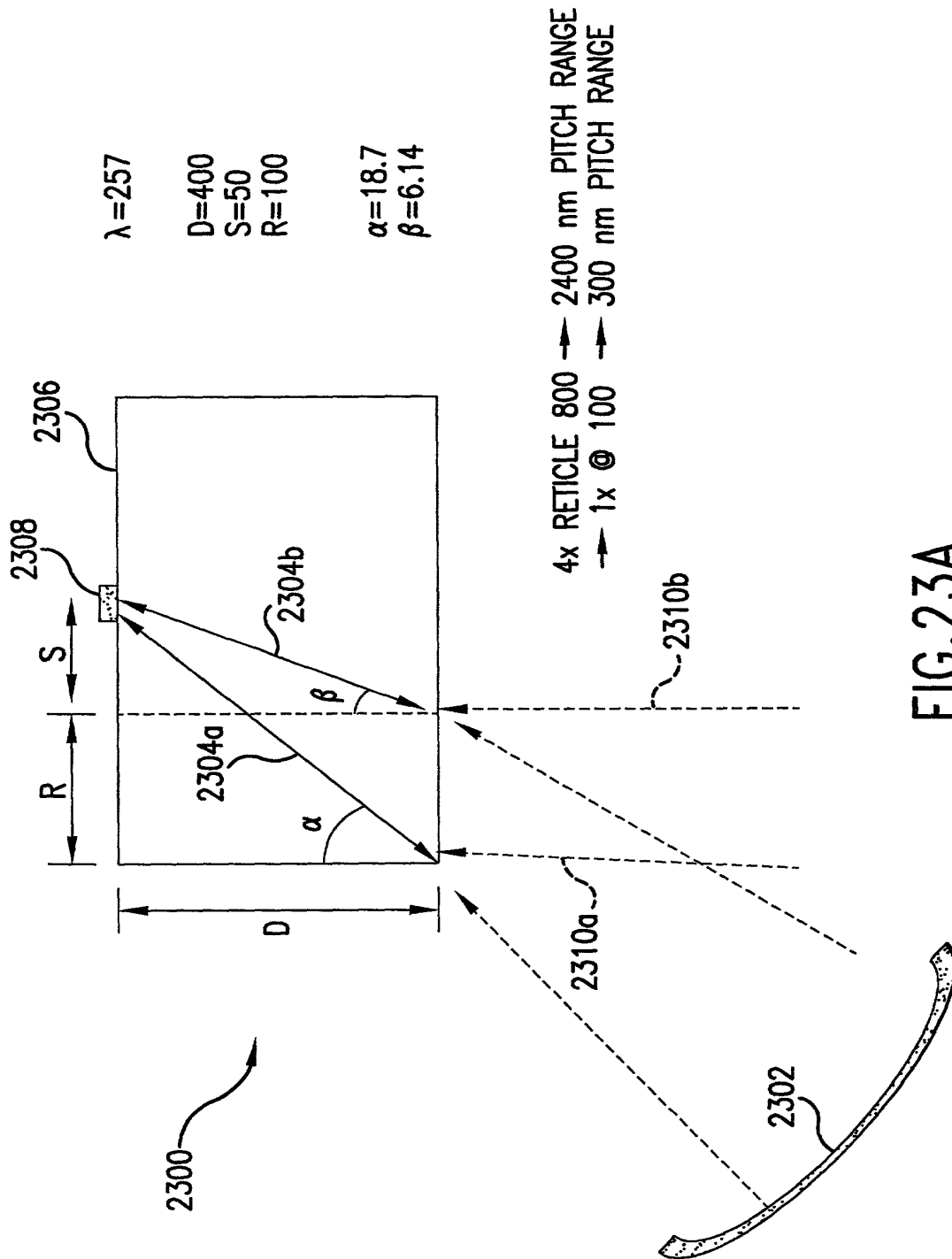


FIG.22B

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 $\lambda = 257$

D=400

S=50

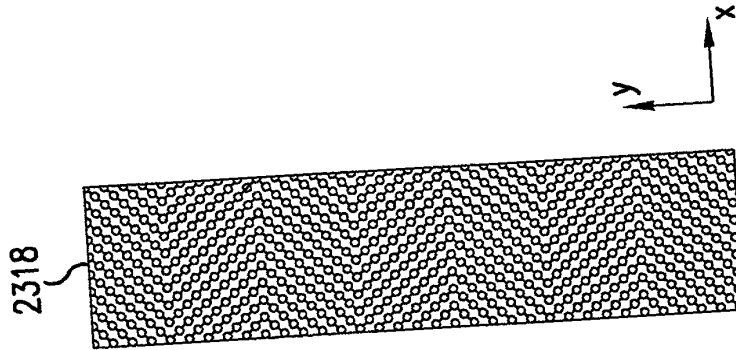
R=100

 $\alpha=18.7$
$$\beta = 6.14$$

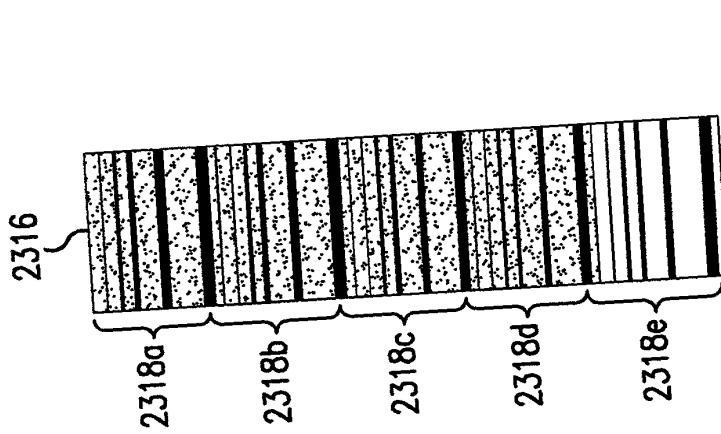
4x RETICLE 800 → 2400 nm PITCH RANGE
→ 1x @ 100 → 300 nm PITCH RANGE

1x @ 100

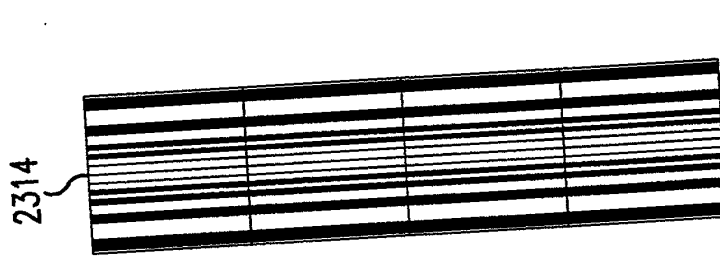
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CIRCULAR ZONE
 PLATE ARRAY
 FIG. 23E



INTERLACED CHIRPED
 HOLOGRAPHIC STRUCTURES
 FIG. 23D



REVERSE CYLINDER
 ZONE PLATE
 FIG. 23C



CYLINDER ZONE
 PLATE
 FIG. 23B

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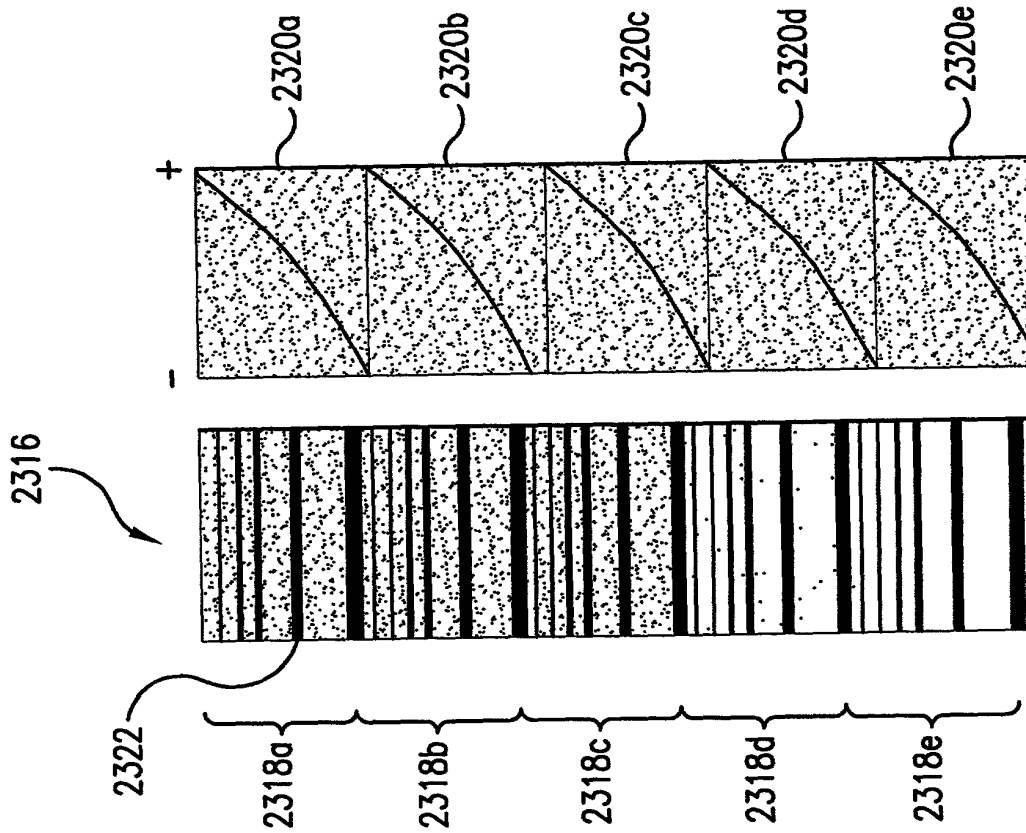


FIG. 23F

FIG. 23F - 2006/06/06

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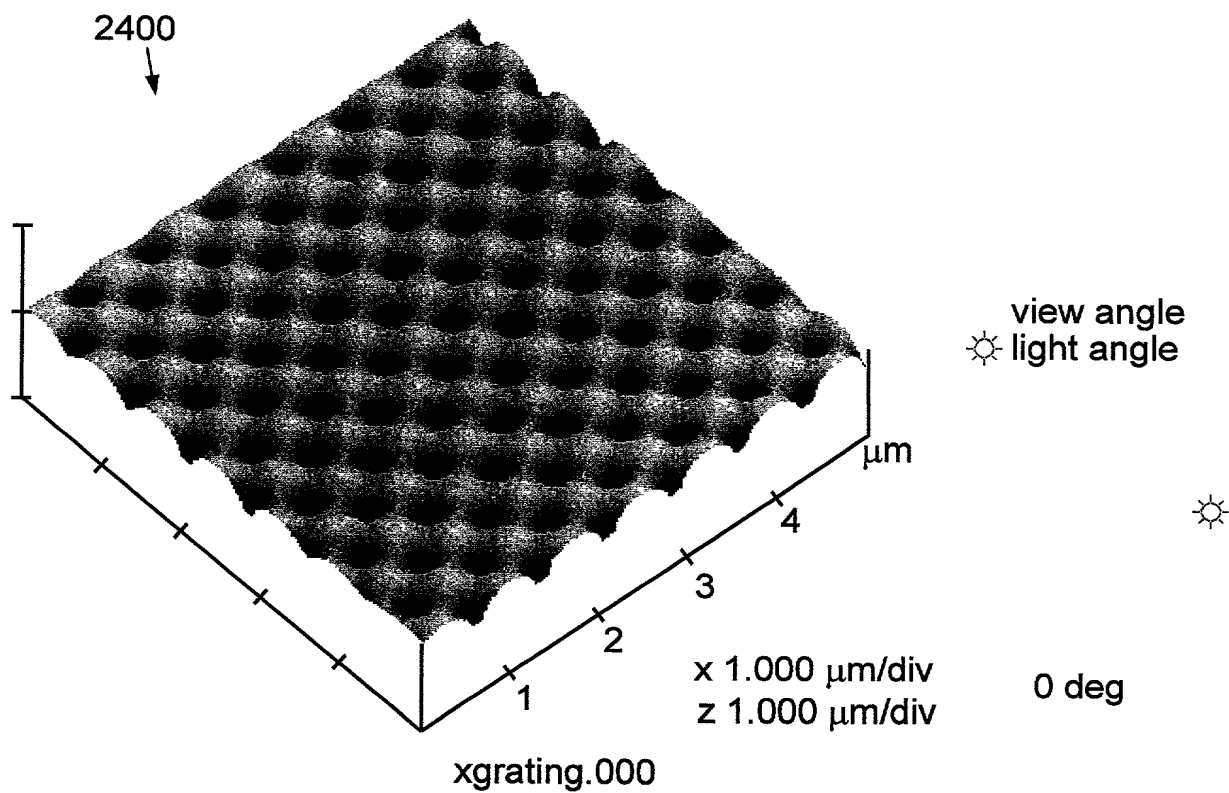


FIG.24

Appl. No. 09/907,902, Group Art Unit: 2621
Dkt. No. 1875.0300001;
Inventor(s): Matthew E. Hansen; Tel: 202/371-2600
Title: System and Method for Characterizing Optical System
Using Holographic Reticles

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2500

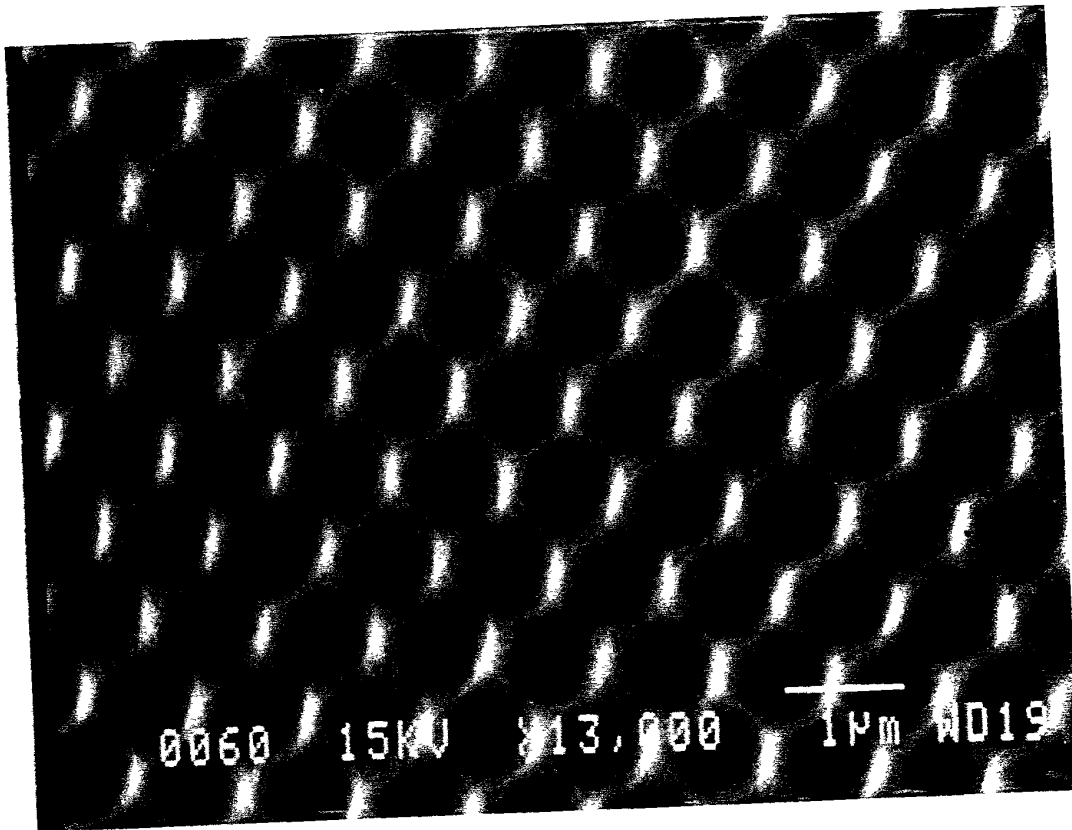


FIG.25

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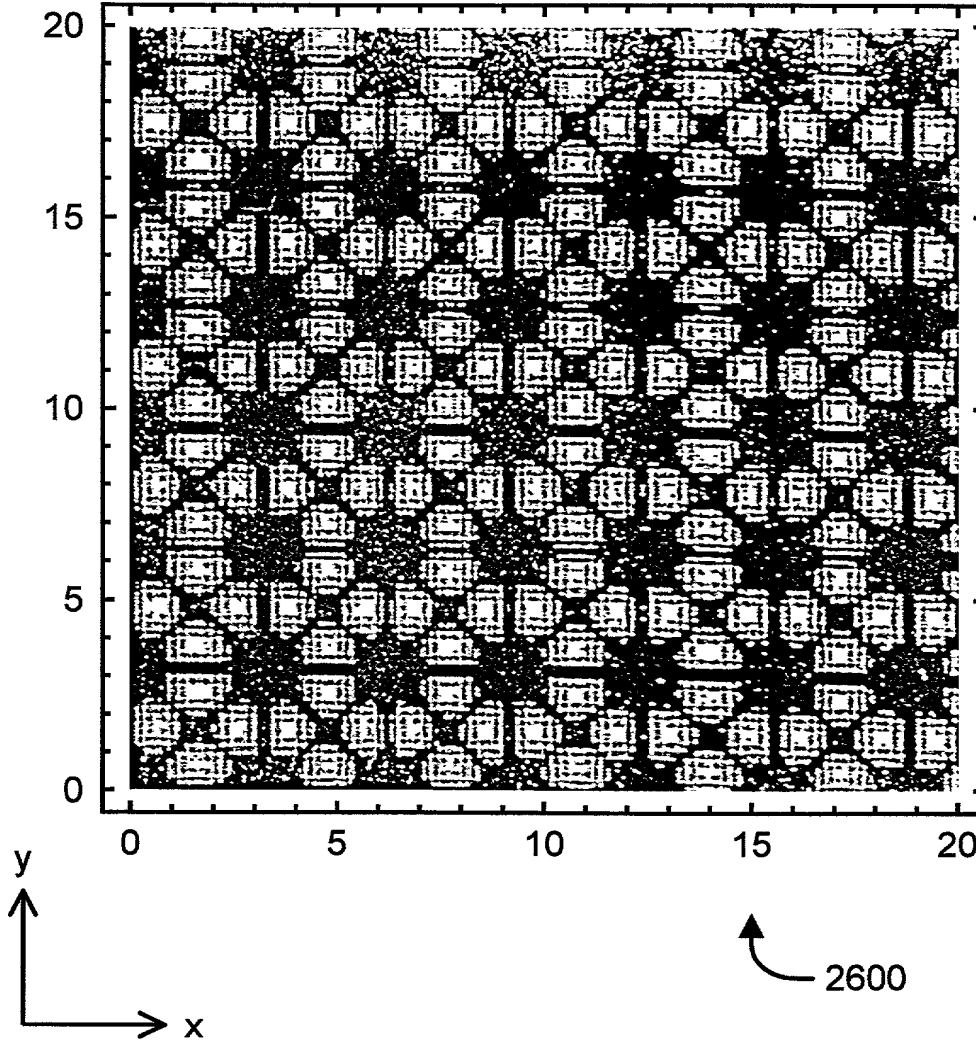


FIG.26

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2700

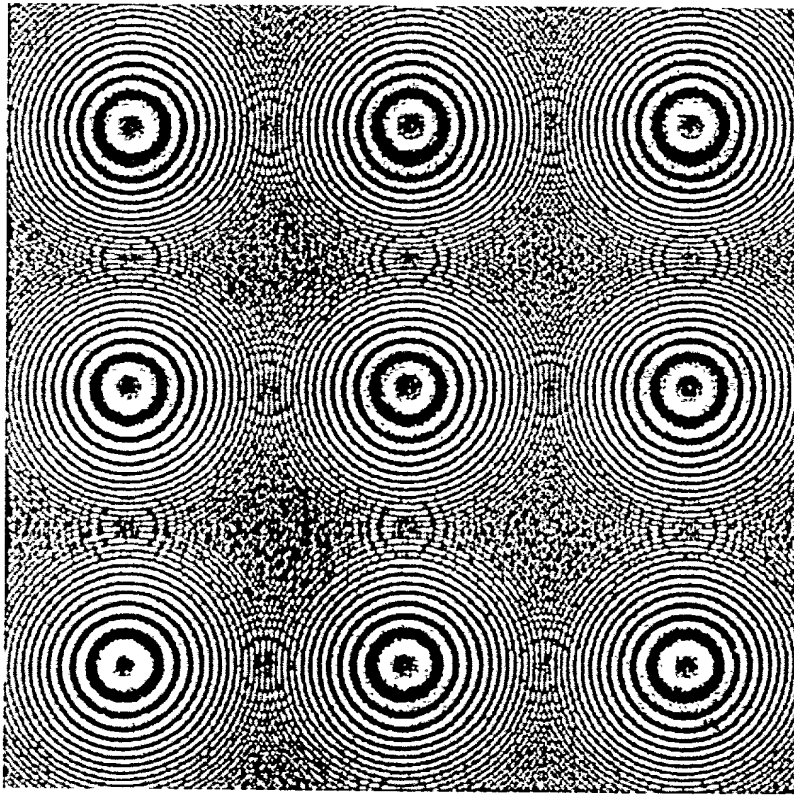


FIG.27

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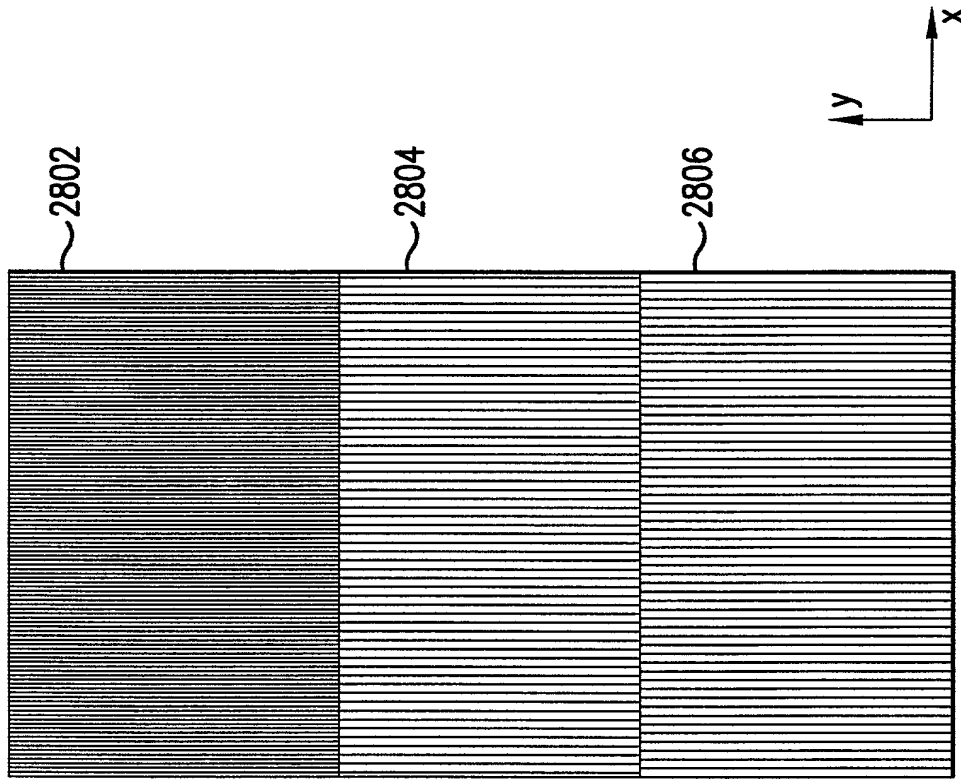


FIG.28

PITCH CHANGE

PHASE CHANGE

FOI: 2005/0660

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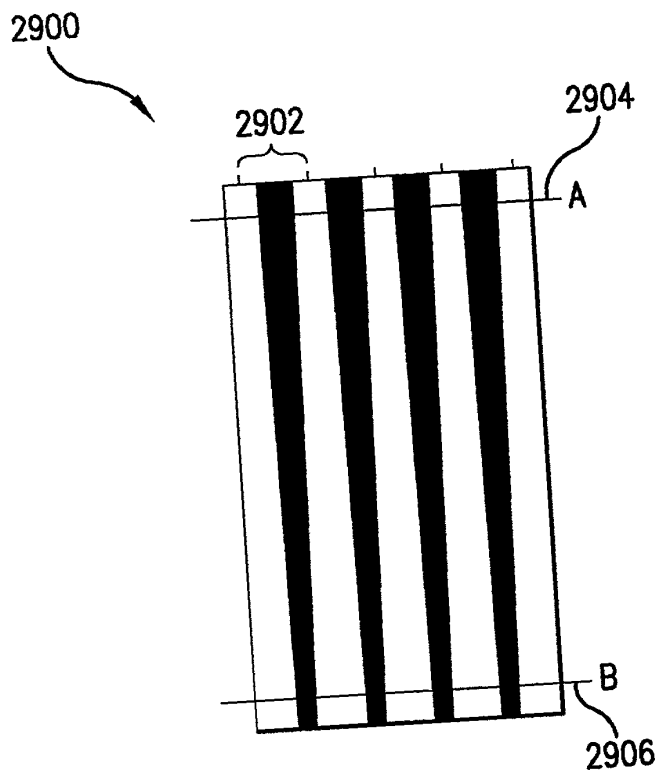


FIG.29A

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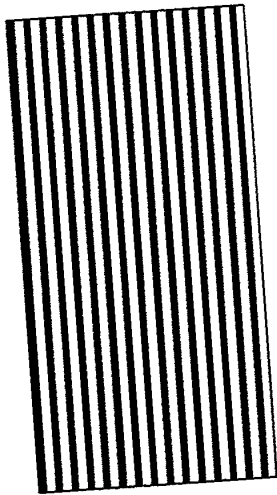
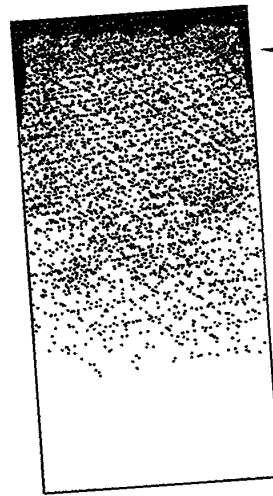


FIG. 29B

2910



2914

2912

FIG. 29C

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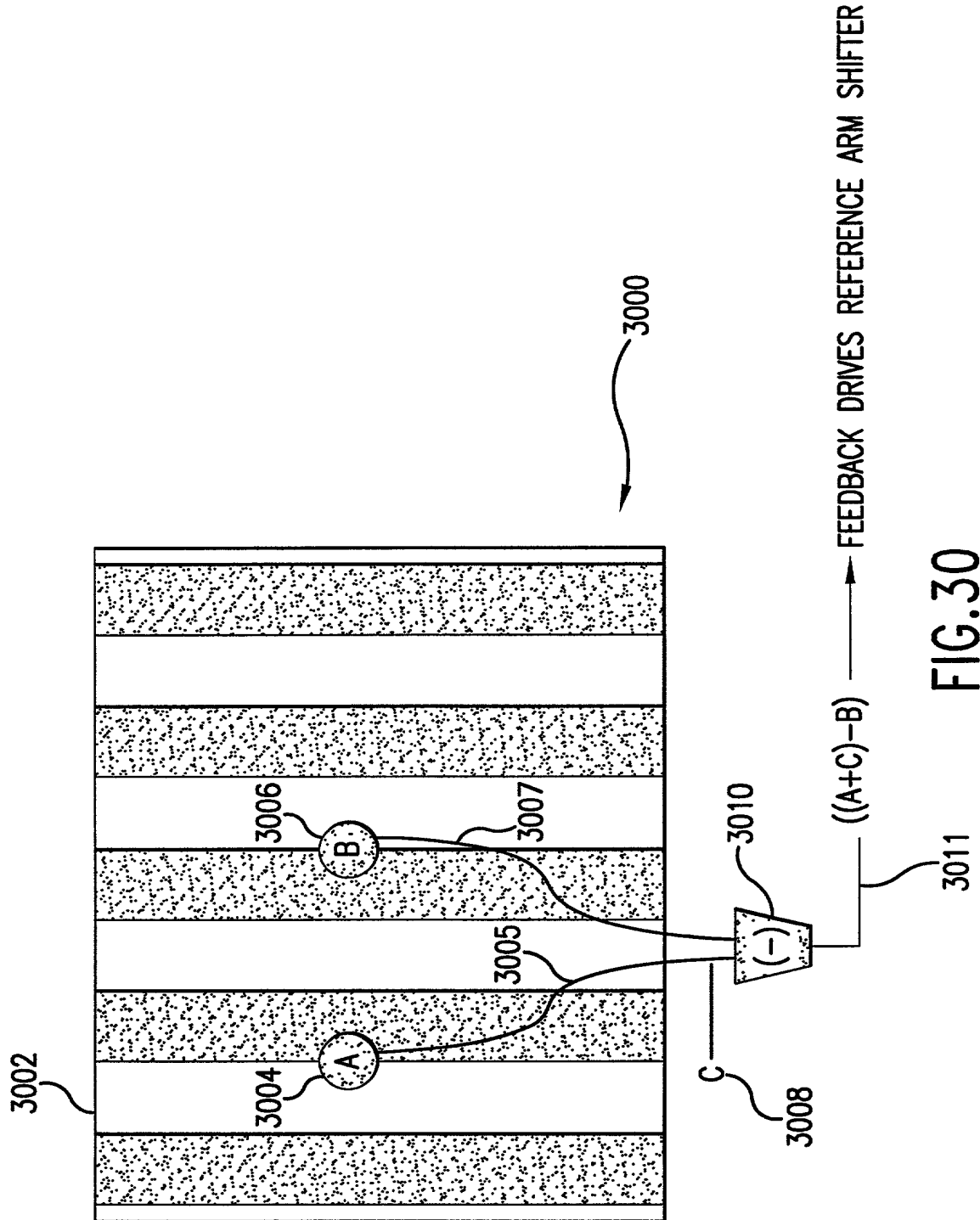


FIG.30

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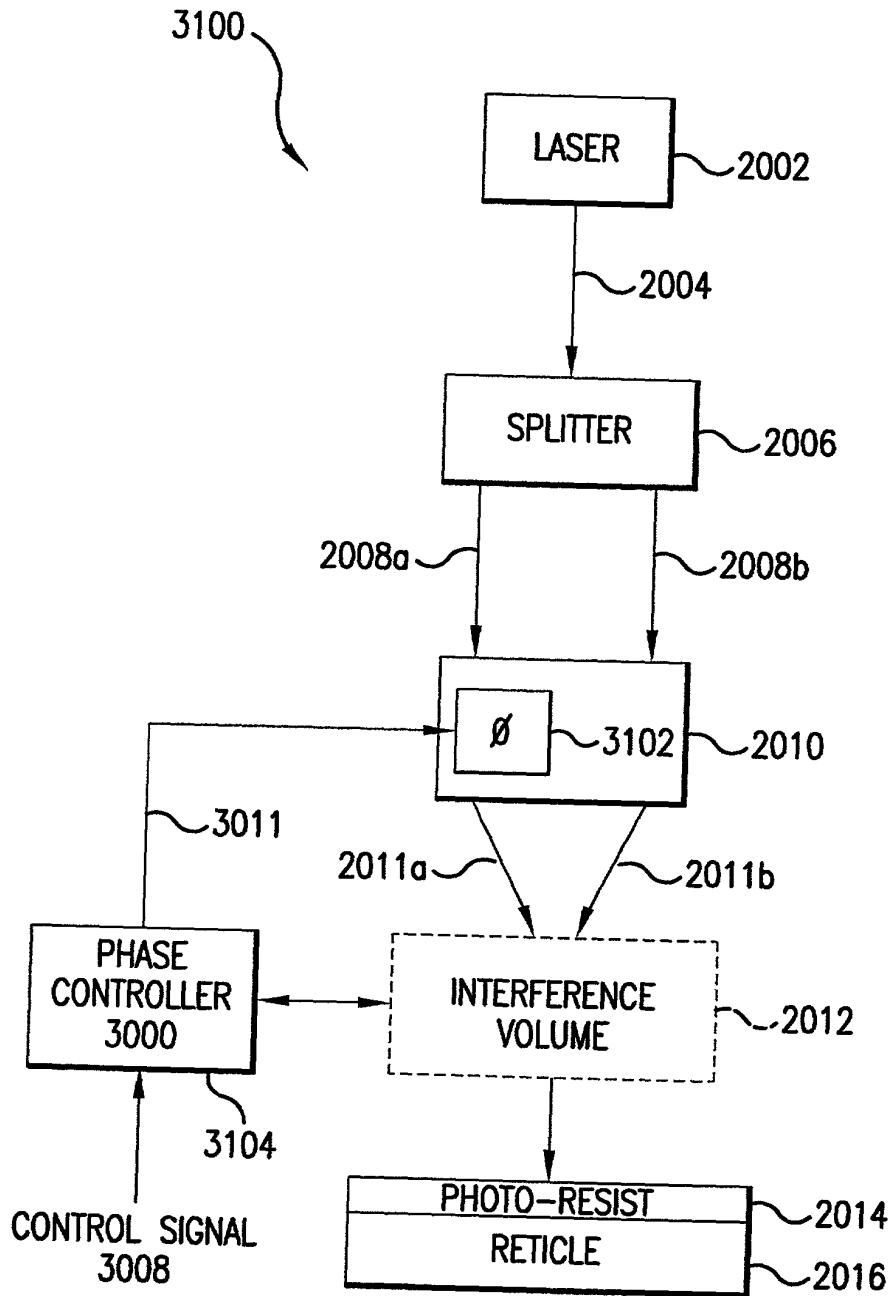


FIG.31

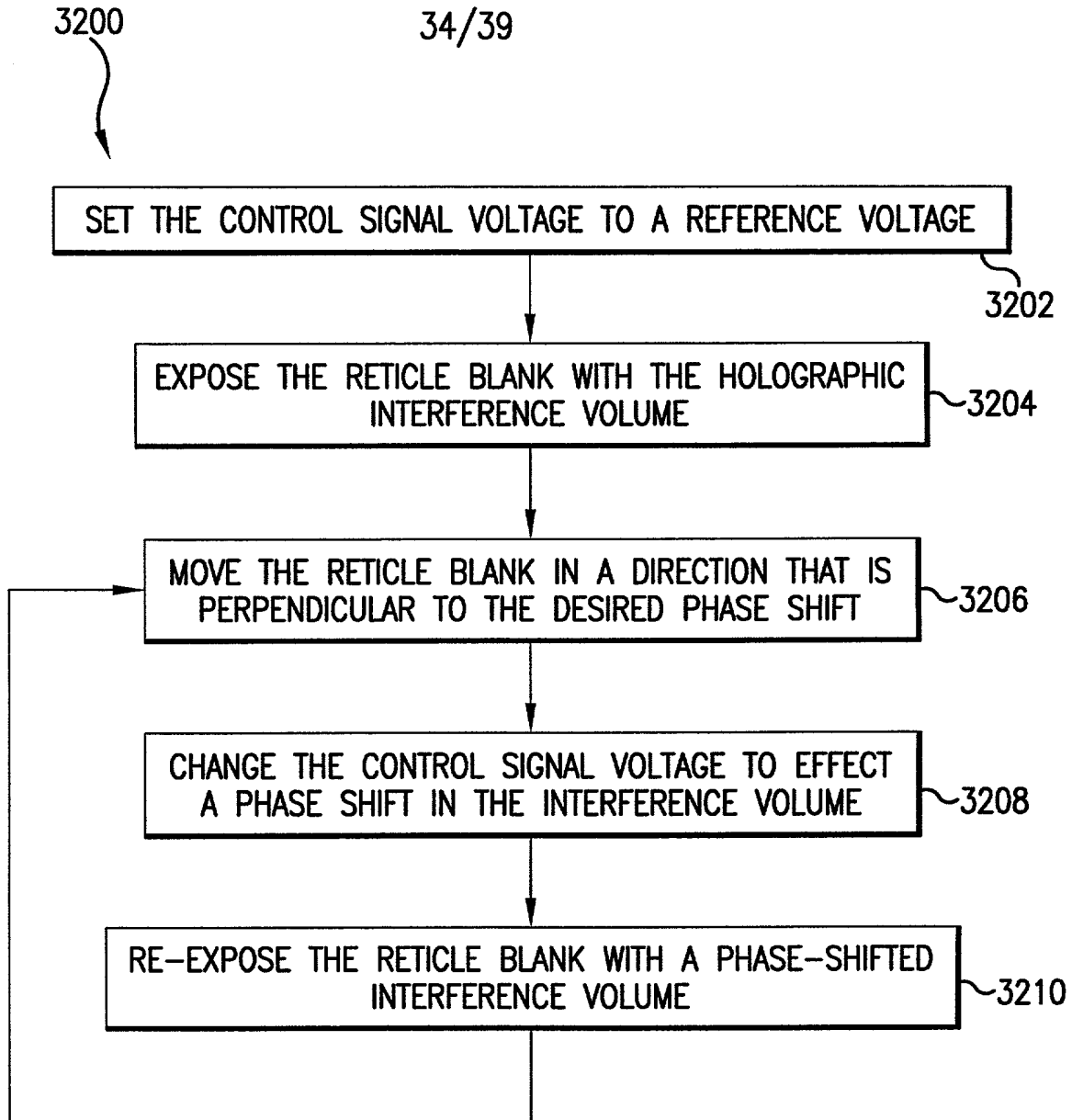


FIG.32

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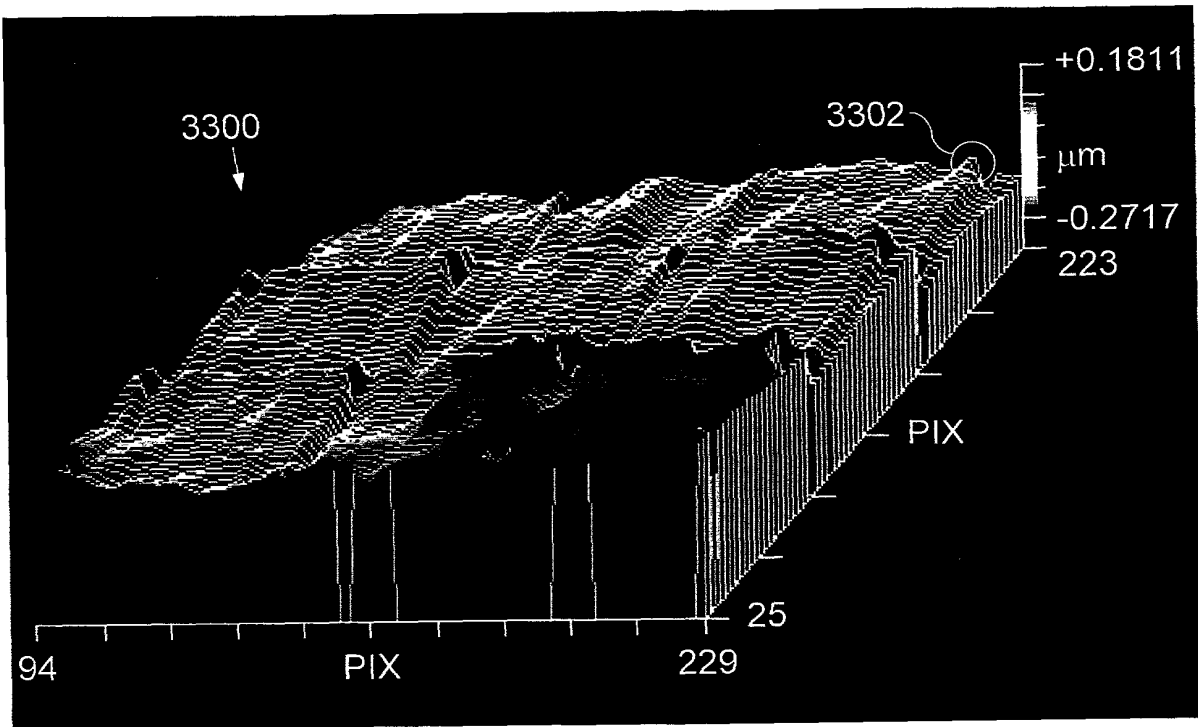


FIG.33

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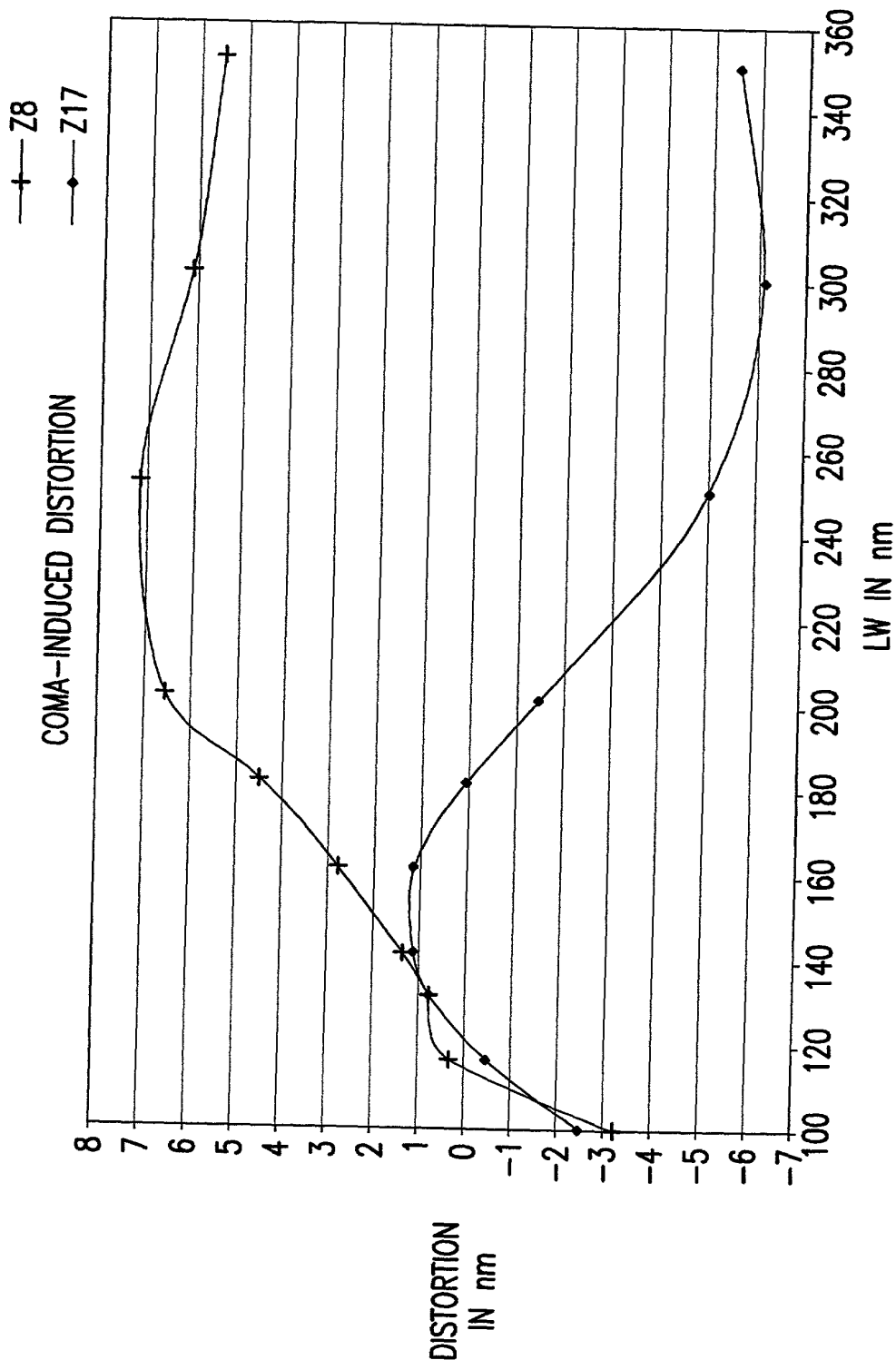


FIG.34

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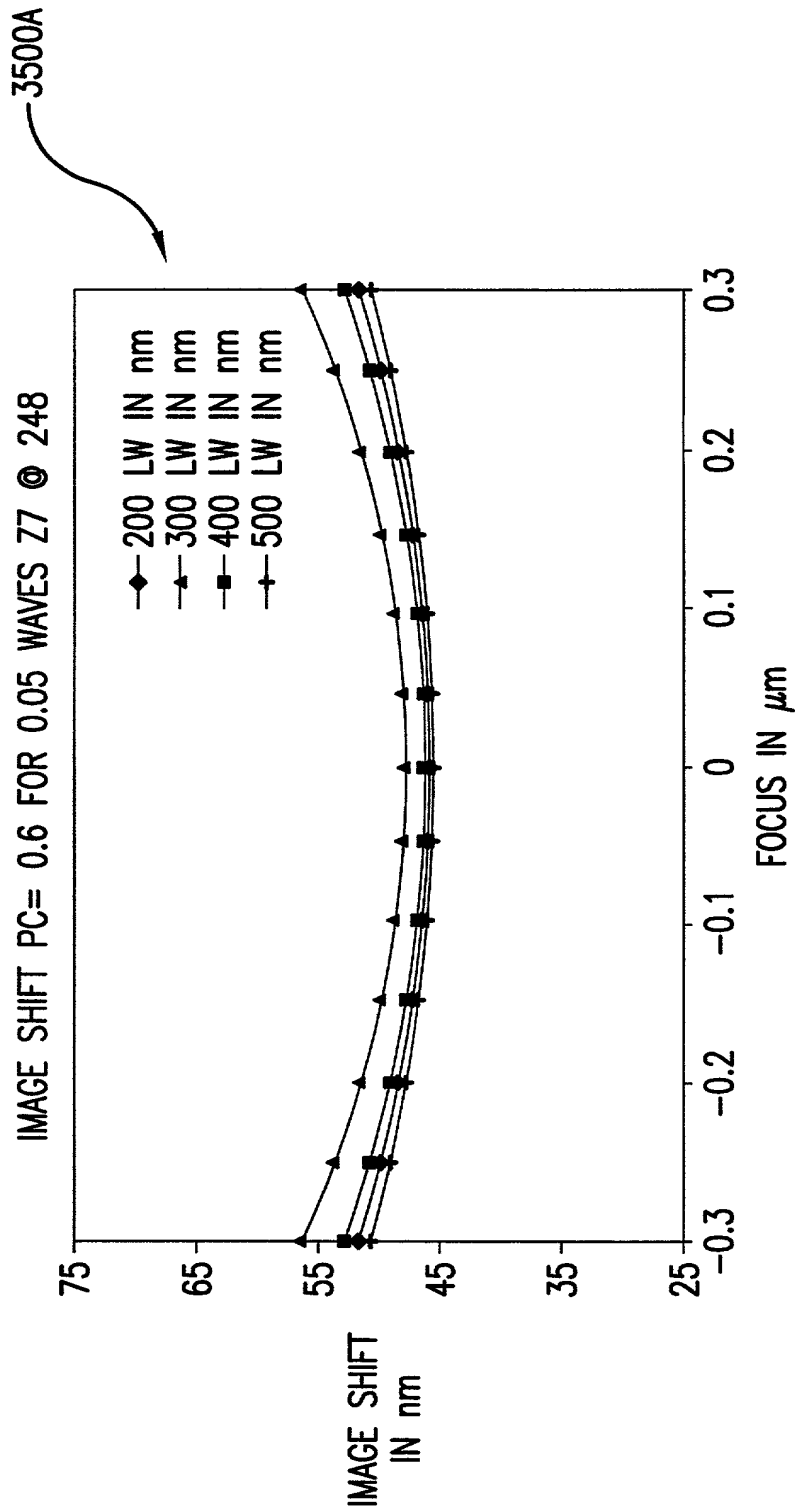


FIG.35A

FIG.35A

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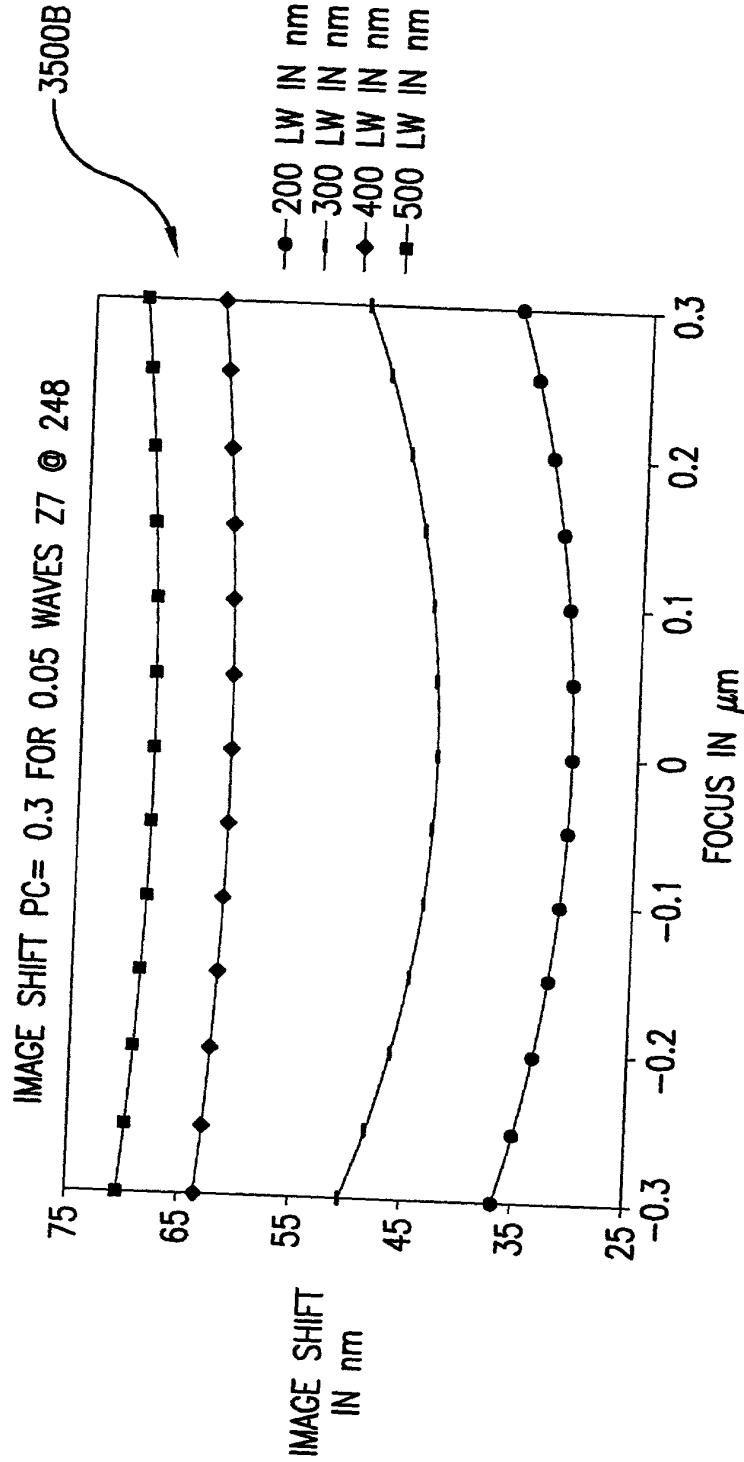


FIG.35B

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3600

LINEWIDTH	DIFFRACTION ORDER			
	1ST	2ND	3RD	4TH
100 nm	a			
200 nm	b	a		
300 nm	c		a	
400 nm	d	b		a
600 nm	e	c		
800 nm		d	b	
900 nm			c	
1000 nm				b
1200 nm		e	d	c

FIG.36

106201" 2005/06/06